

DEPARTMENT OF THE NAVYOFFICE OF NAVAL RESEARCH ARLINGTON, VIRGINIA 22217

IN REPLY REFER TO

The Contract Security Classification Specification (DD Form 254) covering the contract identified in the attached modification has been reviewed and has been found to be current as of the date of this modification.

E. P. BLEDSOE Contracting Officer

STANDARD FORM 30, JULY 1988	<u> </u>	 :			-	· · · · · · · · · · · · · · · · · · ·			······································
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CONTRACT NUMBER: NOOO14-69-C-0181

MODIFICATION NO: POOCO5

1. In Block Number 21 of the Face Page of the Contract, delete the figure "\$93,208.00" and substitute in lieu thereof the figure "\$178,058.00."

- 2. In Block Number 12 of the Face Page of Modification P00004, delete the "Completion Date" in its entirety.
- 3. Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety, and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOOOL4-69-C-OL81, consisting of: Face Page; Schedule; Exhibit A, and General Provisions pages 1 through 29, identified as 'C(P) - October 1969.'"

4. Delete Section B of the Schedule in its entirety and substitute in lieu thereof the following:

"SECTION B - SPECIFICATION OF WORK

"Line Item No.	Supplies/Services	Amount
0001.	Scope of Work and Reports - See Exhibit A, dated 14 February 1972, attached hereto, and made a part hereof.	(See Exhibit A)
	EAM TITLE: BEHAVIORAL BIOPHYSICS."	

5. Delete Section C in its entirety and substitute in lieu thereof the following:

"SECTION C - PERIOD OF PERFORMANCE

The performance of work under this contract shall commence on 15 February 1969 and shall be completed on 14 February 1973."

6. Delete Section D in its entirety and substitute in lieu thereof the following:

"SECTION D - SCIENTIFIC OFFICER

The Scientific Officer under this contract is the Director, Physiology Programs, Biological and Medical Sciences Division, Office of Naval Research, Department of the Navy, 800 N. Quincy Street, Arlington, Virginia 22217."

- 7. Effective as of the date of this modification, Paragraph (1) under Section F, "Reports", shall read as follows:
- "(1) The Contractor shall submit not more than fifty (50) copies of status reports to the Scientific Officer on the dates specified in Exhibit A, and not more than one hundred (100) copies of a final technical report to be distributed in accordance with the following distribution list:

CONTRACT NUMBER: NOOO14-69-C-0181

MODIFICATION NUMBER: POOOO5

Paragraph (1), Section F Continued

Addressee	DODAAD Code	Number of Unclassified	
Scientific Officer	N00014	1	٦
Cognizant ONR Branch Office	N62879	1	ī
Administrative Contracting Officer	S3910A	1	l
Director, Naval Research Laboratory	NOO173	6	0
Washington, D. C. 20390			
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Director, Naval Research Laboratory	N00173	6	1
Washington, D. C. 20390			
Attention: Technical Information Division			
Defense Boumentation Center, Building 5,	S47031	12	2
Cameron Station, Alexandria, Virginia 22314			
Additional copies to be distributed in			
accordance with instructions furnished by	$NOOO11_{4}$	65	65
the Scientific Officer			100

With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In the technical reports (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.

8. Delete Section G of the Schedule and substitute in lieu thereof the following:

"SECTION G - PAYMENT INSTRUCTIONS FOR MULTIPLE FUND ACCOUNTING CITATIONS

In making disbursements from multiple appropriations under this contract, the Disbursing Officer shall make disbursements of appropriations on a first-in, first-out basis, except that Appropriation ACR's: AD and AE shall be used only in connection with Exhibit Line Item AOO2".

9. Add the following new Sections H, I, and J to the Contract Schedule:

"SECTION H - MATERIAL INSPECTION AND RECEIVING REPORT (1969 DEC)

At the time of each delivery of supplies or services under this contract, the contractor shall prepare and furnish to the Government a Material Inspection and Receiving Report in the manner and to the extent required by ASPR Appendix I, Material Inspection and Receiving Report. Unless otherwise provided in the contract, the point of final inspection and acceptance is the Scientific Officer designated herein."

CONTRACT NUMBER: NOOOLL-69-C-0181 MODIFICATION NO: POOCO5

"SECTION I - INVENTION DISCLOSURES AND REPORTS

The Contractor shall submit all invention disclosures and reports required by paragraph (c) of the Patent Rights Clause No. 43 to the Administrative Contracting Officer (ACO).

The ACO will forward such disclosures and reports directly to:

Patent Counsel (Code 315) Office of Naval Research Department of the Navy Arlington, Va. 22217

The Patent Counsel will return the reports along with a recommendation to the ACO.

The Patent Counsel will represent the Contracting Officer with regard to invention reporting matters arising under this contract."

"SECTION J - STABILIZATION OF PRICES, RENTS, WAGES, AND SALARIES (1971 OCT)

- (a) By Executive Order 11627, dated October 15, 1971, the President stabilized prices, rents, wages, and salaries. The contractor represents that to the best of his knowledge and belief he is in complete compliance with Executive Order 11627. Further, the contractor warrants that the amounts invoiced under this contract will not exceed the lower of (1) the contract price, or (2) the maximum levels established in accordance with the order.
- (b) The contractor agrees to insert the substance of this clause, including this paragraph (b), in all subcontracts for supplies or services issued under this contract."

This modification increases the fixed price of said contract by \$84,850.00, which increase is chargeable against the appropriations set forth on Page 1, hereof.

CONTRACT NUMBER: CONTRACT EXHIBIT:

CONTRACT LINE ITME:

DATE:

A 0001

14 February 1972

N00014-69-C-0181

Item No. Supplies/Services

1001

The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Officer or his authorized representative within the scope of this contract, shall study the effects of exposure to radio frequency energy and ionized air on performance.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
AALOOJ	Status Reports Cover- ing Previous Subline Items 1AA through 1AJ.	From 15 February 1969 through 15 December 1970	\$38,120.00	AA and AB
OOLAE	Status Report	15 February 1971 15 April 1971 15 June 1971 15 August 1971 15 October 1971 15 December 1971 15 February 1972 15 April 1972 15 June 1972 15 August 1972 15 October 1972 15 December 1972 Due Not Later Than	\$ 3,490.00 \$ 3,545.00 \$ 3,545.00 \$ 3,545.00 \$ 3,545.00 \$ 3,547.00 \$ 4,105.00 \$ 4,105.00 \$ 4,105.00 \$ 4,105.00 \$ 4,105.00 \$ 4,105.00	AB AC AC AC AC AC AF AF AF AF
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The Contractor shall design, develop, optimize and test a fixed small scale model of weakly electric fish to assess its possible utility in detecting various metal and non-metal objects in water.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
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CONTRACT NUMBER: MODIFICATION NUMBER:

N00014-69-C-0181

PODIFICATION NUMBER: POOOOL

2. On the face page of the contract, in Block Number 21, delete the figure "\$62,882.00," and substitute in lieu thereof the figure "\$93,208.00."

3. Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NO0014-69-C-0181, consisting of: Face Page; Schedule; Exhibit A, dated 15 November 1970; and General Provisions pages 1 through 29, identified as 'C(P) - October 1969.'"

4. Effective as of the date of this modification, delete Section B of the Schedule in its entirety and substitute in lieu thereof the following:

"SECTION B - SPECIFICATION OF WORK

"Line

Item No. Supplies/Services

Amount

0001

Scope of Work and Reports - See Exhibit A, dated 15 November 1970, attached hereto.

EAM TITLE: BEHAVIORAL BIOPHYSICS."

- 5. Effective as of the date of this modification, delete paragraph (1) of Section E of the Schedule in its entirety and substitute in lieu thereof the following:
- "(1) Except to the extent otherwise provided herein, the Government shall pay to the Contractor as full compensation for the performance of work hereunder, the total price specified in Block Number 21 on the face page hereof. Upon receipt of properly certified invoices and a certification by the Contract Administrator that status (progress) reports have been submitted in accordance with Section F, hereof, payments shall be made notwithstanding any provisions of clause 2 of the contract to the contrary, in accordance with Exhibit A, attached hereto and made a part hereof; provided, however, that the final payment shall not be made until the Scientific Officer has received the final report from the Contractor and has certified receipt and acceptance thereof to the Contract Administrator."
- 6. Effective as of the date of this modification, delete Section F of the Schedule in its entirety and substitute in lieu thereof the following:

"SECTION F - REPORTS

"(1) The Contractor shall submit not more than fifty (50) copies of status reports to the Scientific Officer on the dates specified in Exhibit A, and not more than one hundred (100) copies of a final technical report to be distributed in accordance with the following distribution list:

N00014-69-0-0181

MODIFICATION NUMBER: POOOOL

Addressee	Number o	f Copies Classified
Scientific Officer	1	4
Cognizant ONR Branch Office	1	: 4
Administrative Contracting Officer	i	1
Director, Naval Research Laboratory	ľ	1
Washington, D. C. 20390		
Attention: Library, Code 2029 (ONRL)	6	Ω
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Attention: Technical Information Division	6	1
Defense Documentation Center, Building 5.		l
Cameron Station, Alexandria, Virginia 22314	20	20
Additional copies to be Distributed in accordance	~~	20
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With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In the technical reperts (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.

"(2) The Contractor shall include a completed "Document Control Data — R&D" form (DD Form 1473) as the first page of each copy of the technical report prepared under this contract. The form contains instructions for preparation. The cognizant Government Contract Administrator will provide assistance to the Contractor in obtaining the required forms. Administrative type reports, managerial (status) reports, and reprints submitted as technical reports are excluded from this requirement.

"(3) Unless otherwise authorized in writing by the Contracting Officer, reports

submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 production units of any page or a total of 25,000 production units of a multiple-page report. A production unit means one sheet, size 8 x 10½", one side only, one color. Technical reports are subject to further duplication by the Government by photographic processes. This requirement will be observed during preparation and production of the reports. Specifically, (i) reproduced text material will be in the form of black characters on white opaque paper; (ii) half-tones will be kept to an absolute minimum consistent with the communication of scientific and technical information; black-and-white linework is preferred; linework will be sharp and clear, of consistent density, and reproduced on white opaque paper; and (iii) material presented in the form of charts, tables or graphs will appear in a final reproduced size large enough to be clearly legible. Graph coordinate rulings or grid lines will be spaced as far apart as practicable. Reprints of published technical articles are not within the scope of this paragraph (3)."

N00014-69-C-0181

MODIFICATION NUMBER: POOCOL

7. Add the following new Section G of the Schedule:

"SECTION G - PAYMENT INSTRUCTIONS FOR MULTIPLE FUND ACCOUNTING CITATIONS

"In making disbursements from multiple appropriations under this contract, the Disbursing Officer shall make disbursements of appropriations on a first-in, first-out basis, except that Appropriation ACR: AD shall be used only in connection with Exhibit Line Item ACC2."

This modification increases the total price of Contract NOO014-69-C-0181 by \$30,326.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

N00014-69-C-0181

CONTRACT EXHIBIT: CONTRACT LINE ITEM:

0001

DATE:

15 November 1970

Item No. Supplies/Services

A001

The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Officer or his authorized representative within the scope of this contract, shall study the effects of exposure to radio frequency energy and ionized air on performance.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
A001AA	Status Reports Covering Subline Items 1AA through 1AJ	From 15 February 1969 Through 15 December 1970	\$38,720.00	AA and AB
A001 AB	Status Report	15 February 1971	\$ 3,490.00	AB
A001AC	Status Report	15 April 1971	\$ 3,545.00	AC
AOO1AD	Status Report	15 June 1971	\$ 3,545.00	AC
AOO1AE	Status Report	15 August 1971	\$ 3,545.00	AC
AOO1AF	Status Report	15 October 1971	\$ 3,545.00	AC
A001AG	Status Report	15 December 1971	\$ 3,545.00	AC
AOO1AH	Final Report	Due Not Later Than	-	
	•	14 April 1972	\$ 3,547.00	AC

A002

The Contractor shall initiate and complete an analytical review of unique sensory systems which selected animals use in obtaining information about objects in their environments. The review is designed to provide information such as: what is the nature of the mechanism; does the system have potential useful application in development of a technique for classifying an object (man, mine, etc.) in the water or on the bottom; can the system be modeled; do we have all the necessary data for modeling; if not identify data requirements; what are possible limitations; and what improvements might make the system more useful in classifying objects in water.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
A002AA A002AB A002AC	Status Report Status Report Status Report	31 January 1971 15 April 1971 30 June 1971 Due Not Later Than	\$7,581.00 \$7,581.00 \$7,581.00	AD AD AD
A002AD	Final Report	31 October 1971	\$7,583.00	AD.

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- 1. Effective as of the date of this modification, the General Provisions entitled "C(P) October 1969," pages 1 through 29, are hereby substituted for the General Provisions entitled "C(P) March 1967," pages 1 through 32, with "Alterations" thereto and all subsequent modifications thereto issued prior to this Modification Number POO3.
- 2. It is the intention of the parties bereto that all references in the Schedule issued under this contract to any clause or clauses of the contract shall be deemed to refer to the corresponding or like clause or clauses of the General Provisions attached hereto.
- 3. Further, it is the desire of the Government and the Contractor that additional research on behavioral biophysics be performed. To accomplish this, there are hereby provided an increase in the total price and an extension in the period of performance of Contract NOOOl4-69-C-Ol81. In consideration of the foregoing, said contract, as modified, is hereby further modified as follows:
- (a) On the face page of the contract, in Block Number 21, delete the figure "\$41,610.00," and substitute in lieu thereof the figure "\$62,882.00."
- (b) Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOOOL4-69-G-OL81, consisting of: face page; Schedule; and General Provisions pages 1 through 29, identified as 'C(P) - October 1969."

(c) Effective as of the date of this modification, Section B of the Schedule shall read as follows:

"SECTION B - SPECIFICATION OF WORK

"Line Item No.	Supplies/Services	Amount
1	The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Office or his authorized representative within the scope of this contract, shall study the effects of exposure tradio frequency energy and ionized air on performance.	er S

EAM TITLE: BEHAVIORAL BIOPHYSICS

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NUMBER: POO3

Line Item Amount Supplies/Services No. \$10,200.00 1AA - Reports through 15 August 1969 3,490.00 1AB - Report of 15 October 1.969 490.00ء 1AC - Report of 15 December 1969 3,490.00 1AD - Report of 15 February 1970 1AE - Report of 15 April 1970 3,490.00 3,490.00 1AF - Report of 15 June 1970 3,490.00 1AG - Report of 15 August 1970 1AH - Report - Due Not Later/Than 3.490.00 15 October 1970 3,490.00 1AJ - Report - Due Not Later Than 15 December 1970 1AK - Report - Due Not Later Than 3,490.00 15 February 1971 A AL - Report- Due . Not Later Than 3,545.00 15 April 1971 1AM - Report - Due Not Later Than 3,545.00 15 June 1971 .lAN - Report - Due Not Later Than 3,545.00 15 August 1971 1AP - Report - Due Not Later Than 3,545.00 15 October 1971 1AQ - Report - Due Not Later Than 3,545.00 15 December 1971 LAR - Final Report - Due Not Later Than 3,547.00 14 April 1972 \$62,882.00 TOTAL

accordance with Sections'E and F of the Schedule."

The above subline items are to be submitted in

(d) Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

"SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1972."

This modification increases the total price of Contract NOOO14-69-C-0181 by \$21,272.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

(a) Definitions Used in this Clause.

- (1) <u>Subject Invention</u> means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.
- (2) <u>Governmental purpose</u> means the rights of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) <u>Contract</u> means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) <u>Subcontract and subcontractor</u> mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) Rights Granted to the Government. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

(c) Invention Disclosures and Reports.

- (1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United States, the Contractor shall furnish to the Contracting Officer:
- (1) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than six (6) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions (This Final Report and any Interim Report under (ii) above shall be submitted on DD Form 882 or other format acceptable to the Contracting Officer.);
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor;

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PATENT RIGHTS (DEFERRED) (1968 SEP) (1)

- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;
- (ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

(d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (ii) shall not proceed with the subcontract without the written authorization of the Contracting Officer.
- The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.
- (2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

(e) Domestic Filing of Patent Applications by Contractor.

(1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of

each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a patent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences, the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).

(2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

(f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
 - (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English translation of such application, and, convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, non-exclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

(g) Withholding of Payment.

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(2).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.

- (3) After payments total eighty percent (80%) of the amount of this contract, and if no amount is required to be withheld under (2) above, the Contracting Officer may, if he deems such action warranted because of the Contractor's performance under the Patent Rights clause of this contract or other known Government contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.
- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provisions of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
- (h) Contractor's Request for Greater Rights. The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit inswriting to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

(i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty—free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
- (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right to require the granting of a license to an applicant under any such Invention:
- (i) on a nonexclusive, royalty-free basis, unless the Contractor, his licensee, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues on such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should be retained for a further period of time; or
- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) Right to Disclose Subject Inventions. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) <u>Forfeiture of Rights in Unreported Subject Inventions</u>. The Contractor shall forfeit to the Covernment all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(1)(iii) of this clause,

PATENT RIGHTS (DEFERRED) (1968 SEP) (4)

whichever is later; provided, that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was due entirely to causes beyond his control and without his fault or negligence. The Contractor shall be deemed to hold any such forfeited Subject Invention, and the patent applications and patents pertaining thereto, in trust for the Government pending written assignment of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to unreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.

(1) Examination of Records Relating to Inventions. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.

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(Complete classified items by separate correspondence)				FROITHIN SECURITY CLEARANCE REQUIRED FOR CONTRACT PERFORMANCE OR FOR ACCESS TO CLASSIFIED INFORMATION IS SECURE.				
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PROPOSAL 5. IF THIS IS A FOLLOW-ON CONTRACT, ENTER PRECEDING CONTRACT NUMBER AND DATE COMPLETED DOES NOT APPLY								
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Randomline, Inc. Old York & Moreland Roads Willow Grove, Pennsylvania 196		6. Name and address of cognizant security office (Include ZIP Code) Commander, Defense Contract Administration Services Region Politics Box 7478 Francial Latin, Pennsylvania 19101						
7a. NAME AND ADDRESS OF FIRST TIER SUBCONTRACTOR (Include ZIP Code)	(If of	plica	ble)	<u></u>				
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98. GENERAL IDENTIFICATION OF THE PROCUREMENT FO	R WHIC	4 1412	SPECI	FICALION AFFETES		•		
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ACCESS TO CHYPTOGRAPHIC INFORMATION		Х.						
ACCESS TO COMMUNICATION ANALYSIS INFORMATION		X.						
DEFENSE ODCUMENTATION CENTER OR DEFENSE INFOR- MATION ANALYSIS CENTER SERVICES MAY BE REQUESTED (If yes, see paragraph T, app I, Industrial Security Menual.)		<u></u>						
REFER ALL QUESTIONS PERTAINING TO CONTRACT SECURITY CLASSIFICATION SPECIFICATION TO THE OFFICIAL NAMED BELOW (NORMALLY, thru ACO (Item 14b): EMERGENCY, direct with written record of inquiry and response to ACO) (thru prime contractor for subcontracts)								
a. PROGRAM/PROJECT MANAGER OR ACTIVITY (Name, Ti Organization)				b. ADDRESS, TELE	PHONE	NUMBER AND OFFICE SYMB	OL (Include	
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	JECTS, EVEN THOUGH SUCH INFORMA IS CONSIDERED UNCLASSIFIED, SHALL NOT ED BY THE INDUSTRIAL SECURITY MANUAL (paragraph 5n and Appendix IX).					
PROPOSED PUBLIC RELEASES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO RELEASE DIRECT X THROUGH (Specify)						
Physiological Psychology Programs Office of Naval Research (Code 454), Washington, D.C. 20360						
TO THE DIRECTORATE FOR SECURITY REVIEW, OFFICE OF THE ASSI ACCORDANCE WITH PARAGRAPH SO OF THE INDUSTRIAL SECURITY M	ISTANT SECRETARY OF DEFENSE (Public Affairs)* FOR REVIEW IN ANUAL.					
*In the case of non-DoD user agencies, see footnote, parag	raph 5n, Industrial Security Manual.					
13. SECURITY CLASSIFICATION SPECIFICATIONS FOR THIS CONTR.	ACT ARE SET FORTH BELOW (Check which are applicable):					
DD FORM 254C ATTACHED (hereby made a part of this specification).						
DOCUMENT(S) LISTED BELOW (hereby made part of this specification).						
X AS STATED BELOW						
Technical reports classified as high as Secret may be supplied the contractor by ONR, DDC, other military agencies, and other DOD contractors. These reports may be retained for the duration of the contract unless no longer needed. When a report has served its purpose it should be destroyed in accordance with current security regulations, or returned to the originating activity (if required). Upon completion of the contract all remaining classified material will be destroyed in accordance with current security regulations unless retention has been requested and authorized in accordance with paragraph 5 of the Industrial Security Manual.						
CONTRACT SECURITY CLASSIFICATION SPECIFICATIONS FOR OFFICIAL NAMED IN ITEM 145 BELOW:	SUBCONTRACTS ISSUING FROM THIS CONTRACT WILL BE APPROVED BY THE					
REQUIRED DISTRIBUTION:	14. THIS CONTRACT SECURITY CLASSIFICATION SPECIFICATION AND ATTACK- MENTS REFERENCED HEREIN. APPROVED BY THE USER AGENCY CONTRACTING OFFICER OR HIS REPRESENTATIVE NAMED BELOW:					
COGNIZANT SECURITY OFFICE (Item 66)	SIGNATURE					
ADMINISTRATIVE CONTRACTING OFFICE (Item 14b)	404					
MATERIAL INSPECTOR	a. V. Sincoln					
Director, Feberal Bureau of Investigation WASHINGTON, D.C. (Only for Items 2s and 2b) (Attachments bereto not included.)	TYPED NAME AND TITLE OF APPROVING OFFICIAL					
SUBCONTRACTOR (Item 7a)	Contracting Officer a. APPROVING OFFICIAL'S ACTIVITY AND ADDRESS (Include ZIP Code)					
COGNIZANT SECURITY OFFICE (Item 76)	Office of Naval Research, Department of the					
ADDITIONAL DISTRIBUTION:	Navy, Arlington, Virginia 22217					
XX. ONR Code 454	 NAME AND ADDRESS OF ADMINISTRATIVE CONTRACTING OFFICE (Include ZIP Code) 					
	Commander, Defense Contract					
	Post Office Box 7478, Philadelphia Pa. 19101					
	PAGE 2 OF 2 PAGES D-6764					

STANDARD FORM 30, JULY 1966	A. CNDAE	NT OF SO	LICITATIO	N /MODIE	ATION OF CONTRACT	PAGE OF
GENERAL SERVICES ADMINISTRATION FED. PROC. REG. (4) CFR) 1-16,101					CATION OF CONTRACT	1
1. AMEHOMENT/MODIFICATION NO.	j			PURCHASE REQUE	vode	licable)
P002 5. ISSUED BY			-1-7	46(42)12-	22-07 454	DDE 39
Procuring Contracting Officer	-	3014		-	se Contract Administr	
Office of Naval Research					iladelphia	
Department of the Navy Washington, D. C. 20360			P. O. 1	30x 7478	_	
washington, ix c. godoc			Philade	lphia, Pe	nnsylvania 19101	
7. CONTRACTOR COL NAME AND ADDRESS COL	DE 709653	FA	CILITY CODE	<u> 1955 39</u>		
				7	SOLICITATION NO. N. A.	
	***			ł		4
Randomlin		_			DATED	(See block 9)
,	reland Roads		100		MODIFICATION OF [X] CONTRACT (ORDER), 60 C	
Code) WIIIOW GE	ove, Pennsyl	rvanita 12	7130		X CONTRACT/ORDER 14-69-0	<u>-01 81</u>
1				1	DATED 69 Feb. 15	(See block 11)
<u> </u>	-			-		
9, THIS BLOCK APPLIES ONLY TO AME	ENDMENTS OF SOLICI	TATIONS (N. A	A.)			
The above numbered solicitation i			•	e specified for rece		not extended.
				=	mended, by one of the following methods:	N D.,
telegram which includes a reference to	the solicitation and amo	ndment numbers.	FAILURE OF	CUR ACKNOWLE	t on each copy of the offer submitted; or (c DGMENT TO BE RECEIVED AT THE ISS	UING OFFICE PRIOR
change may be made by telegram or lett	er, provided such teleg	ram or letter ma	kas reference t	the solicitation of	mendment you desire to change an offer al and this amendment, and is received prior to	the opening hour and
date specified. APPROPRIATION OSJ. 10. SYMBOL AND SUBMEAD CLASS	BUREAU S	UE- AUTHO	R'N TRANS	PROPERTY ACCTG. ACT.	COUNTRY COST CODE	AMOUNT
10. SYMBOL AND SUBMEAD CLASS	CONTROL NO. AL	LOT. ACCTG.	ACI. TYPE	ALCIG. ACI.		
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11. THIS BLOCK APPLIES ONLY TO MO	DIFICATIONS OF CON	TRACTS/ORDER	15			
(a) This Change Order is issued p						 .
The Changes set forth in black				rh as rhannes in re	sying office, appropriation data, etc.) set fo	wih in blook 12
(c) X This Supplemental Agreement if	contract as set forth in	block 12.	······································			
12. DESCRIPTION OF AMENDMENT/MODI		···········				
In order to aid the :	research bei	ng condu	cted und	er Contra	ct NOO014-69-C-0181 i	t is the
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					, said contract as mo	
is hereby further mo	dified as se	t forth	on the a	ttached pa	ages and made a part	hereof.
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Except as provided herein, all terms and con	ditions of the document	referenced in blo	ck 8, as heretaf	re changed, remain	unchanged and in full force and effect.	
CONTRACTOR/OFFEROR IS NOT REQUIRED TO SKIN THIS DOCUME	[30 row			,	•	IES TO ISSUING OFFICE
14. NAME OF CONTRACTOR/OFFEROR 17. UNITED STATES OF AMERICA						
BY Q. R. Landle, R. By Cw. Lackuy						
(Signature of ;	person authorized to sign)				(Signature of Contracting Officer)	
15. NAME AND TITLE OF SIGNER (Type	or print)	16. DATE SI		,	ACTING OFFICER (Type or print)	19. DATE SIGNED
A R ZANDLE		2/11/	70	C. W. HAR	CLEY	1970 FEB 5

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO.: POO2

1. Effective as of the date of this Modification, add the following new Section to the Schedule:

"SECTION G - GOVERNMENT-FURNISHED PROPERTY

"The Government will furnish to the Contractor as Government-Furnished Property for use under this contract, the following:

Item No. <u>Description</u> <u>Cost</u>

1

Data Analysis System consisting of the following listed items incorporated into system:

USN-1-0341 Camera Polaroid, Model 104 USN-6-0341 Computer of Average Transients, Model 1000 USN-7-0341 Transducer Stratham USN-10-0341 Senior Voitohmyst USN-13-0341 Audio Generator, RCA Model WA-lili-C USN-17-0341 Electrometer, Keithly 610A USN-20-0341 Power Supply, P-S-12/24 USN-25-0341 Culmotive Recorder, Gerbrand USN-33-0341 Scope Camera, Tektronix C-12 USN~36-0341 Stop Watch USN=49-0341 Camera USN-53-03if Dynograph, Beckman Model 541, S/N 297 USN-54-0341 Biological Amplifier, Model DS2C USM-55-0341 Recorder, Esterline-Angus, Model A620A USM-56-0341 Dictating Machine, IBM, S/N 513583 USM-57-0341 Oscilloscope, Tektronix Model 565 with (1) 2A61 and (1) 2A63 Amplifier USN-63-0341 Screen Room

NOOO14-69-C-0181

MODIFICATION NO.: POO2

Item No.

Description

Cost

2

Specimen Set-up System consisting of the following items incorporated into system:

USN-3-0341 Pressure Cooker USN-4-0341 Respiration Regulator USN-5-0341 Pipette Puller, KOPF USN-11.-0341 Larygnscope USN-12-0341 Blood Pressure Gauge USN-22-0341 Motor, Part of Rat Box, Newark CMO USN-30-0341 1/2" Electric Drill, W/Stand, Craftsman USN-31-0341 Bovine Electocautery USN-32-0341 Stereotoxic Instrument, KOPF 1204 USN-34-0341 Ministrue Micromanipulator, Model MM-3 USN-35-0341 Balance Scale, Ohaus, Model 3502 USN-38-0341 Microscope, B & L Model 313353-USN-39-0341 Pump, Cole Parameter, 7064-5 USN=42-0341 Cat Skeleton USN-43-034! Vaporizer USN-44-034? Electrical Drill, Osteological USN-45-0341 Ear Bars, (Part of USN-32-0341) USN-46-0341 Regulator, 306-0071-800 USN-48-0341 Bright Spot Headlight USN-58-0341 Transducer, Grass FT-03B USN-60-0311 Balance Scale, SEKO, Model 1137 USN-61-0341 Laboratory Oven,

LaPine 317-85

300

N00014-69-C-0181 P002

Item No.

Description

Cost

3

Behavioral Assay System consisting of the following items incorporated into system:

USN-8-034! Program Timer TM-15K391 USN-9-0341 L Band Oscillator Applied Microwave USN-14-0341 Laboratory Simulator AEL Model 104A USN-15-0341 Photic Simulator, AEL Model 127 USN-16-0341 Stimlus Isolator, AEL Model 112 USN-18-0341 Power Oscillator, Microdot 411A USN-19-03L1 Coax To Waveguide Adaptor, Scientific Atlanta USN-21-0341 Lo Power Terminator, Microlab TA5MB USN-23-0341 Coax Attentuator, Empore AT50-10 USN-24-0341 Coax Attentuator. Empire AT50-40 USN-26-0341 Lo-Pass Filter, H/P Model 360A USN-27-0341 Thermistor Mount, H/P Model 477B USN-29-034? Bench Saw W/Motor Craftsman USN-37-0341 Programmer, Fohringer 1182M1 USN-47-0341 40 Drawer Parts Cabinet USN-51-0341 Programmer, Forhinger USN-52-0341 Programmer. Forhinger USN-59-0347 Pellet Dispenser, Forhinger USN-62-0341 Horn Antenna, Model 11-1-1

STANDARD FORM 30, JULY 196 ENERTAL SERVICES ADMINISTRATED, PROC. REG. (41 CFR) 1-16	TION AMEN				N/MODIFI				
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CONTRACTOR NAME AND ADDRESS	CODE 70961	ź3	FACILITY	CODE	1955 39	8,		,	
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est, city, Randomline, Inc. Willow Grove, Pa. 19090					۱ "	MODIFICATION OF			
ZIP	-	2 * 2/24.27 5 **	.5			[X] c	ONTRACT/ORDER NOOO	14-69-C-0181	
<u> </u>	,		-	<u></u>				15 (See block 11)	
THIS BLOCK APPLIES ONLY The above numbered splici Offerors must acknowledge rece (a) By signing and returning	itation is amended as s ipt of this amendment :	et forth in block prior to the hour	and date specifie	ed in the se	olicitation, or as a	mended, by	one of the following methods	(c) By seggrate letter or	
(a) By signing and retworing telegram which includes a refer TO THE HOUR AND DATE SPI change may be made by telegral date specified.	ence to the solicitation ECIFIED MAY RESULT in or letter, provided si	TIN REJECTIO	letter makes ret	ER. If, b	the solicitation a	mendment y	ou desire to change an offer adment, and is received prior	already submitted, such to the opening hour and	
APPROPRIATION SYMBOL AND SUBHEAD	DBJ. BUREAU GLASS CONTROL I	SUB-	AUTHOR'N ACCTG. ACT.	TRANS.	PROPERTY ACCTG. ACT.	COUNTRY	COST CODE	AMOUNT	
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(c) X This Supplemental Again it modifies the above an DESCRIPTION OF AMENDMEN It is the desir behavioral biop an increase in of performance	eoment is entered into a umbered contract as se T/MODIFICATION te of the Go hysics be p the price o	pursuant to suth t forth in block veriment erforme	t and the	Cont	ractor th	at add	e are hereby pr	rch on rovided	
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cept as provided herein, all terms CONTRACTOR/OFFEROR	re wort							OPIES TO ISSUING OFFICE	
CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT NAME OF CONTRACTOR/OFFEROR TO SIGN THIS DOCUMENT AND RETURN 3 COPIES TO ISSUING OFFICE 17. UNITED STATES OF AMERICA									
101C	styre of person authorized	Legical		_ BY _	C.W. JA	arte 15	Minuture of Contraction Officer)		
NAME AND TITLE OF SIGNE			, DATE SIGNED	18. N	AME OF CONTRA	ACTING OF	FICER THE PIECHAL	4 19. DATE SIGNED	
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CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO.: POO1

1. On the face page of the contract, in Block Number 21, delete the figure "\$20,680.00," and substitute in lieu thereof the figure "\$41,610.00."

2. Under Section B of the Schedule, delete Line Items No. 1AA through 1AF in their entirety and substitute in lieu thereof the following:

"1AA - See Section F - through 15 August 1969 1AB - See Section F - 15 October 1969 1AC - See Section F - 15 December 1969 1AD - See Section F - 15 February 1970 1AE - See Section F - 15 April 1970 1AF - See Section F - 15 June 1970 1AG - See Section F - 15 August 1970 1AH - See Section F - 15 October 1970 1AI - See Section F - 15 December 1970	\$10,200.00 3,490.00 3,490.00 3,490.00 3,490.00 3,490.00 3,490.00 3,490.00
JAJ - See Section F - Upon completion of work and submission of final report	3,490.00
TOTAL	\$41,610.00 . "

3. Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

"SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on $1l_4$ February 1971."

4. Effective as of the date of this Modification, clause 42 of the contract, entitled "Patent Rights," shall read as follows:

"L2. PATENT RIGHTS

"The following provisions shall apply to the work to be performed under this contract:

(a) Definitions Used in this Clause.

(1) <u>Subject Invention</u> means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.

- (2) <u>Governmental purpose</u> means the rights of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) <u>Contract</u> means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) <u>Subcontract and subcontractor</u> mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) Rights Granted to the Government. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

(c) Invention Disclosures and Reports.

- (1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United States, the Contractor shall furnish to the Contracting Officer:
- (i) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than six (6) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions (This Final Report and any Interim Report under (ii) above shall be submitted on DD Form 882 or other format acceptable to the Contracting Officer.);
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor;

CONTRACT NUMBER: MODIFICATION NO.:

- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;
- (ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

(d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (ii) shall not proceed with the subcontract without the written authorization of the Contracting Officer.

The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.

(2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

(e) Domestic Filing of Patent Applications by Contractor.

(1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO.: POO1

each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a patent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences, the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).

(2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

(f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
 - (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English translation of such application, and, convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, non-exclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

(g) Withholding of Payment.

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(2).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO.: POO1

- (3) After payments total eighty percent (80%) of the amount of this contract, and if no amount is required to be withheld under (2) above, the Contracting Officer may, if he deems such action warranted because of the Contractor's performance under the Patent Rights clause of this contract or other known Government contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.
- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provisions of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
- (h) Contractor's Request for Greater Rights. The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit in writing to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

(i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
- (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right to require the granting of a license to an applicant under any such Invention:
- (i) on a nonexclusive, royalty-free basis, unless the Contractor, his licenses, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues on such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should be retained for a further period of time; or
- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) Right to Disclose Subject Inventions. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) Forfeiture of Rights in Unreported Subject Inventions. The Contractor shall forfeit to the Government all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(1)(iii) of this clause,

CONTRACT NUMBER: MODIFICATION NO.:

NOOO14-69-C-0181

whichever is later; <u>provided</u>, that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was due entirely to causes beyond his control and without his fault or negligence. The Contractor shall be deemed to hold any such forfeited Subject Invention, and the patent applications and patents pertaining thereto, in trust for the Government pending written assignment of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to unreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.

- (1) Examination of Records Relating to Inventions. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.
- 5. Effective as of the date of this Medification, the "ALTERATIONS IN CONTRACT (For C(P) March 1967) of October 1968 and June 1969," which are attached hereto, are hereby substituted for the "ALTERATIONS IN CONTRACT (For C(P) March 1967) of October 1968," which are attached to the General Provisions.

This Modification increases the total price of Contract NOOO14-69-C-0181 by \$20,930.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

The following Alterations are hereby made in the General Provisions of this contract:

1. MODIFICATIONS

- (a) In clause 6, entitled "Government Property," make the following changes:
- (i) In paragraph (c), in the sixth line, delete the first word "of," and substitute in lieu thereof the "or."
- (ii) Delete paragraph (d) in its entirety and substitute in lieu thereof the following:
- "(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the 'Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors' (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract."
- (iii) Delete paragraph (g) in its entirety and substitute in lieu thereof the following:

"(g) Risk of Loss.

- (1) Except for loss, destruction or damage resulting from a failure of the 'Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the maintenance, repair, protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:
- (i) caused by any peril while the property is in transit off the Contractor's premises; or
- (ii) caused by any of the following perils while the property is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils —
- (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandalism and malicious

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

7

mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks, excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby risking of a body of water; nuclear reaction, nuclear radiation or radioactive contamination; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces, or by an agent of any such government, power, authority, or forces; or

(B) other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.

The perils as set forth in (i) and (ii) above are hereinafter called 'excepted perils.'

If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the Contractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

The term 'Contractor's managerial personnel' as used herein means the Contractor's directors, officers and any of his managers, superintendents, or other equivalent representatives who have supervision or direction of:

- (i) all or substantially all of the Contractor's business;
- (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which the contract is being performed; or
- (iii) a separate and complete major industrial operation in connection with the performance of this contract.
- (2) The Contractor represents that he is not including in the price hereunder, and agrees that he will not hereafter include in any price to the Government, any charge or reserve for insurance (including any self-insurance funds or reserve) covering loss or destruction of or damage to the Government property caused by any excepted peril.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

- (3) Upon the happening of loss or destruction of or damage to any Government property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
 - (i) the lost, destroyed, and damaged Government property;
 - (ii) the time and origin of the loss, destruction, or damage;
- (iii) all known interests in commingled property of which the Government property is a part; and
- (iv) the insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed directly), in accordance with the procedures provided for in the 'Changes' clause of this contract.

- (4) With the approval of the Contracting Officer after loss or destruction of or damage to Government property, and subject to such conditions and limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like, sell for the account of the Government any item of Government property which has been damaged beyond practicable repair, or which is so commingled or combined with property of others, including the Contractor, that separation is impracticable.
- (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foregoing provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

- (6) In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the Government property, caused by an excepted peril, he shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of or damage to the Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government."
- (iv) Delete paragraph (j) in its entirety and substitute in lieu thereof the following:
- "(j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:
- (i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and
- (ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above."

ALTERATIONS IN CONTRACT (For C(P) - March 1967) June 1969

2. DELETIONS AND SUBSTITUTIONS

(a) Clause 12, entitled "Equal Opportunity," is hereby deleted in its entirety and the following substituted in lieu thereof:

"12. EQUAL OPPORTUNITY

"During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
 - (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) June 1969

- (6) In the event of the Contractor's noncompliance with the non-discrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States."

3. DELETIONS

(a) Clause 41, entitled "Order of Precedence," is intentionally deleted in its entirety.

GENERAL PROVISIONS

INDEX OF CLAUSES

Clause No.	<u>Títle</u>	Page No.
1.	Definitions	1
2.	Payments	i
3.	Assignment of Claims	i
4.	Liens and Insurance	†
5.	Federal, State, and Local Taxes	2
6.	Government Property	3
7.	Examination of Records	7
8.	Termination for Convenience of the Government	7
9.	Disputes	10
10.	Military Security Requirements	10
11.	Renegotiation	11
12.	Equal Opportunity	11
13.	Contract Work Hours Standards Act - Overtime Compensation	12
14.	Convict Labor	13 '
15.	Buy American Act	13
16.	Default	13
17.	Priorities, Allocations, and Allotments	14
18.	Utilization of Small Business Concerns	14
19.	Officials Not to Benefit	14
20.	Covenant Against Contingent Fees	14
21.	Gratuities	15
22.	Authorization and Consent	15
23.	Changes	15
24.	Filing of Patent Applications	15
25.	Notice and Assistance Regarding Patent and Copyright Infringement	16
26.	Standards of Work	16
27.	Inspection	16
28.	Walsh-Healey Public Contracts Act	16
29.	Utilization of Concerns in Labor Surplus Areas	17
30.	Interest	17
31.	Competition in Subcontracting	17
32.	Technical Data - Withholding of Payment	17
33.	Limitation on Withholding of Payments	17
34·	Audit	18
35.	Price Reduction for Defective Cost or Pricing Data	18
36.	Subcontractor Cost and Pricing Data	19
37. 38.	Rights in Technical Data	20
	Warranty of Technical Data	22
39.	Government Delay of Work	23
40. 41.	Frequency Authorization	24
42.	Care of Laboratory Animals	24
	Title and Risk of Loss	24
43.	Patent Rights	

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GENERAL PROVISIONS

1. DEFINITIONS

As used throughout this contract, the following terms shall have the meanings set forth below:

- (a) The term "Head of the Agency" or "Secretary" means the Secretary, the Under Secretary, any Assistant Secretary, or any other head or assistant head of the executive or military department or other Federal agency; and the term "his duly authorized representative" means any person or persons or board (other than the Contracting Officer) authorized to act for the Head of the Agency or the Secretary.
- (b) The term "Contracting Officer" means the person executing this contract on behalf of the Government, and any other officer or civilian employee who is a properly designated Contracting Officer; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority.
- (c) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders under this contract.
 - (d) The term "Department" means the Department of the Navy.

2. PAYMENTS

The Contractor shall be paid, upon submission of proper invoices or vouchers, the prices stipulated herein for work delivered or rendered and accepted, less deductions, if any, as herein provided. Unless otherwise specified, payment will be made upon acceptance of any portion of the work delivered or rendered for which a price is separately stated in the contract.

3. ASSIGNMENT OF CLAIMS

- (a) Pursuant to the provisions of the Assignment of Claims Act of 1940, as emended (31 U.S.C. 203, 41 U.S.C. 15), if this contract provides for payments aggregating \$1,000 or more, claims for monies due or to become due the Contractor from the Government under this contract may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment shall cover all amounts payable under this contract and not already paid, and shall not be made to more than one party, except that any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Unless otherwise provided in this contract, payments to an assignee of any monies due or to become due under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or set-off.
- (b) In no event shall copies of this contract or of any plans, specifications, or other similar documents relating to work under this contract, if marked "Top Secret," "Secret," or "Confidential," be furnished to any assignee of any claim arising under this contract or to any other person not entitled to receive the same. However, a copy of any part or all of this contract so marked may be furnished, or any information contained therein may be disclosed, to such assignee upon the prior written authorization of the Contracting Officer.

4. LIENS AND INSURANCE

(a) Any and all partial payments made hereunder shall be secured, when made, by a lien in favor of the Government upon the articles and things contracted for on account of all payments so made and on all material and other property acquired for or allocated to the performance of this contract, except to the extent that the Government, by virtue of any other provision of this contract, or otherwise, shall have valid title to such articles, things, materials, or other property as against other creditors of the Contractor. If such property is not identified by marking or segregation, the Government shall be deemed to have a lien upon a proportionate part of any mass of property with which such property is commingled. Any lien provided for by virtue of this clause is paramount to all other liens under the provisions of an Act approved August 22, 1911 (Public Law 41, 62nd Cong.; 37 Stat. 32; 10 U.S.C. 7521).

- (b) The Contractor, to the extent determined necessary and practicable by the Contracting Officer or his authorized representative, shall identify by marking or segregation all property which is subject to a lien in favor of the Government by virtue of any provision of this contract in such a way as to indicate that it is subject to such lien and that it has been acquired for or allocated to the performance of this contract. In any event, the Contractor shall maintain adequate accounting control over such property on its books and records.
- (c) In the event that the Contractor shall procure or maintain insurance upon any materials or other property upon which a lien exists in favor of the Government pursuant to the terms of this contract, the policy or policies shall contain a loss payable clause making losses payable to the Secretary of the Navy or order. Any payments thereunder shall inure to the benefit of the Government to the extent of any loss suffered by the Government and to the Contractor as to any remaining balance. The foregoing provisions shall not be deemed to require that the Contractor procure or maintain any such insurance.

5. FEDERAL, STATE, AND LOCAL TAXES

- (a) As used throughout this clause, the term "contract date" means the date of this contract. As to additional supplies or services procured by modification of this contract, the term "contract date" means the date of such modification.
- (b) Except as may be otherwise provided in this contract, the contract price includes, to the extent allocable to this contract, all Federal, State, and local taxes which, on the contract data:
- (i) by Constitution, statute, or ordinance, are applicable to this contract, or to the transactions covered by this contract, or to property or interests in property; or
- (ii) pursuant to written ruling or regulation, the authority charged with administering any such tax is assessing or applying to, and is not granting or honoring an exemption for, a contractor under this kind of contract, or the transactions covered by this contract, or property or interests in property.
- (c) Except as may be otherwise provided in this contract, duties in effect on the contract date are included in the contract price, to the extent allocable to this contract.
- (d) (1) If the Contractor is required to pay or bear the burden --
- (i) of any tax or duty which either was not to be included in the contract price pursuant to the requirements of paragraphs (b) and (c), or of a tax or duty specifically excluded from the contract price by a provision of this contract; or
- (ii) of an increase in rate of any tax or duty, whether or not such tax or duty was excluded from the contract price; or
 - (iii) of any interest or penalty on any tax or duty referred to in (i) or (ii) above;

the contract price shall be increased by the amount of such tax, duty, interest, or penalty allocable to this contract; provided, that the Contractor warrants in writing that no amount of such tax, duty, or rate increase was included in the contract price as a contingency reserve or otherwise; and provided, further, that liability for such tax, duty, rate increase, interest, or penalty was not incurred through the fault or negligence of the Contractor or his failure to follow instructions of the Contracting Officer.

- (2) If the Contractor is not required to pay or bear the burden, or obtains a refund or draw-back, in whole or in part, of any tax, duty, interest, or penalty which:
- (i) was to be included in the contract price pursuant to the requirements of paragraphs
 (b) and
 (c);
 - (ii) was included in the contract price; or
 - (iii) was the basis of an increase in the contract price;

the contract price shall be decreased by the amount of such relief, refund, or drawback allocable to this contract, or the allocable amount of such relief, refund, or drawback shall be paid to the

Government, as directed by the Contracting Officer. The contract price also shall be similarly decreased if the Contractor, through his fault or negligence or his failure to follow instructions of the Contracting Officer, is required to pay or bear the burden, or does not obtain a refund or drawback of any such tax, duty, interest, or penalty. Interest paid or credited to the Contractor incident to a refund of taxes shall inure to the benefit of the Government to the extent that such interest was earned after the Contractor was paid or reimbursed by the Government for such taxes.

- (3) Invoices or vouchers covering any adjustment of the contract price pursuant to this paragraph (d) shall set forth the amount thereof as a separate item and shall identify the particular tax or duty involved.
- (4) This paragraph (d) shall not be applicable to social security taxes; income and franchise taxes, other than those levied on or measured by (i) sales or receipts from sales, or (ii) the Contractor's possession of, interest in, or use of property, title to which is in the Government; excess profits taxes; capital stock taxes; unemployment compensation taxes; or property taxes, other than such property taxes, allocable to this contract, as are assessed either on completed supplies covered by this contract, or on the Contractor's possession of, interest in, or use of property, title to which is in the Government.
- (5) No adjustment of less than \$100 is required to be made in the contract price pursuant to this paragraph (d).
- (e) Unless there does not exist any reasonable basis to sustain an exemption, the Government upon request of the Contractor, without further liability, agrees, except as otherwise provided in this contract, to furnish evidence appropriate to establish exemption from any tax which the Contractor warrants in writing was excluded from the contract price. In addition, the Contracting Officer may furnish evidence appropriate to establish exemption from any tax that may, pursuant to this clause, give rise to either an increase or decrease in the contract price. Except as otherwise provided in this contract, evidence appropriate to establish exemption from duties will be furnished only at the discretion of the Contracting Officer.
- (f) (1) The Contractor shall promptly notify the Contracting Officer of all matters pertaining to Federal, State, and local taxes, and duties, that reasonably may be expected to result in either an increase or decrease in the contract price.
- (2) Whenever an increase or decrease in the contract price may be required under this clause, the Contractor shall take action as directed by the Contracting Officer, and the contract price shall be equitably adjusted to cover the costs of such action, including any interest, penalty, and reasonable attorneys' fees.

6. GOVERNMENT PROPERTY

(a) Government-Furnished Property. The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the property described as Governmentfurnished property in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Government-furnished property"). The delivery or performance dates for the supplies or services to be furnished by the Contractor under this contract are based upon the expectation that Government-furnished property suitable for use (except for such property furnished "as is") will be delivered to the Contractor at the times stated in the Schedule, or, if not so stated, in sufficient time to enable the Contractor to meet such delivery or performance dates. In the event that Government-furnished property is not delivered to the Contractor by such time or times, the Contracting Officer shall, upon timely written request made by the Contractor, make a determination of the delay, if any, occasioned the Contractor thereby, and shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by any such delay, in accordance with the procedures provided for in the clause of this contract entitled "Changes." Except for Government-furnished property furnished "as is," in the event the Government-furnished property is received by the Contractor in a condition not suitable for the intended use the Contractor shall, upon receipt thereof, notify the Contracting Officer of such fact and, as directed by the Contracting Officer, either (i) return such property at the Government's expense or otherwise dispose of the property, or (ii) effect repairs or modifications. Upon the completion of (i) or (ii) above, the Contracting Officer upon written request of the Contractor shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by the rejection or disposition, or the repair or modification, in accordance with the procedures provided for in the clause of this contract entitled "Changes." The foregoing provisions for

adjustment are exclusive and the Government shall not be liable to suit for breach of contract by reason of any delay in delivery of Government-furnished property or delivery of such property in a condition not suitable for its intended use.

(b) Changes in Government-Furnished Property.

- (1) By notice in writing, the Contracting Officer may (i) decrease the property provided or to be provided by the Government under this contract, or (ii) substitute other Government-owned property for property to be provided by the Government, or to be acquired by the Contractor for the Government, under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of property covered by such notice.
- (2) In the event of any decrease in or substitution of property pursuant to subparagraph (1) above, or any withdrawal of authority to use property provided under any other contract or lease, which property the Government had agreed in the Schedule to make available for the performance of this contract, the Contracting Officer, upon the written request of the Contractor (or, if the substitution of property causes a decrease in the cost of performance, on his own initiative), shall equitably adjust such contractual provisions as may be affected by the decrease, substitution or withdrawal, in accordance with the procedures provided for in the "Changes" clause of this contract.
- (c) <u>Title.</u> Title to all property furnished by the Government shall remain in the Government. In order to define the obligations of the parties under this clause, title to each item of facilities, special test equipment, and special tooling (other than that subject to a "Special Tooling" clause) acquired by the Contractor for the Government pursuant to this contract shall pass to and vest in the Government when its use in the performance of this contract commences, or upon payment therefor by the Government, whichever is earlier, whether or not title previously vested. All Government-furnished property, together with all property acquired by the Contractor title to which vests in the Government under this paragraph, is subject to the provisions of this clause and is hereinafter collectively referred to as "Government property." Title to Government property shall not be affected by the incorporation or attachment thereof to any property not owned by the Government, nor shall such Government property, or any part thereof, be or become a fixture or lose its identity as personalty by reason of affixation to any realty.
- (d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the "Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors" (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract.
- (e) <u>Use of Government Property.</u> The Government property shall, unless otherwise provided herein or approved by the Contracting Officer, be used only for the performance of this contract.
- (f) Utilization, Maintenance and Repair of Government Property. The Contractor shall maintain and administer, in accordance with sound industrial practice, and in accordance with applicable provisions of Appendix B, a program for the utilization, maintenance, repair, protection, and preservation of Government property, until disposed of by the Contractor in accordance with this clause. In the event that any damage occurs to Government property the risk of which has been assumed by the Government under this contract, the Government shall replace such items or the Contractor shall make such repair of the property as the Government directs; provided, however, that if the Contractor cannot effect such repair within the time required, the Contractor shall dispose of such property in the manner directed by the Contracting Officer. The contract price includes no compensation to the Contractor for the performance of any repair or replacement for which the Government is responsible, and an equitable adjustment will be made in any contractual provisions affected by such repair or replacement of Government property made at the direction of the Government, in accordance with the procedures provided for in the "Changes" clause of this contract. Any repair or replacement for which the Contractor is responsible under the provisions of this contract shall be accomplished by the Contractor at his own expense.

(g) Risk of Loss.

(1) Except for loss, destruction or damage resulting from a failure of the Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the utilization, maintenance, repair,

protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:

- (i) caused by any peril while the property is in transit off the Contractor's premises; or
- (ii) caused by any of the following perils while the property is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils --
- (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandalism and malicious mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks, excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby rising of a body of water; nuclear reaction, nuclear radiation or radioactive contamination; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces, or by an agent of any such government, power, authority, or forces; or
- (B) other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.

The perils as set forth in (i) and (ii) above are hereinafter called "excepted perils."

If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the subcontractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

The term "Contractor's managerial personnel" as used herein means the Contractor's directors, officers and any of his managers, superintendents, or other equivalent representatives who have supervision or direction of:

- (i) all or substantially all of the Contractor's business;
- (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which the contract is being performed; or
- (iii) a separate and complete major industrial operation in connection with the performance of this contract.
- (2) The Contractor represents that he is not including in the price hereunder, and agrees that he will not hereafter include in any price to the Government, any charge or reserve for insurance (including any self-insurance funds or reserve) covering loss or destruction of or damage to the Government property caused by any excepted peril.
- (3) Upon the happening of loss or destruction of or damage to any Government property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Covernment property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
 - (i) the lost, destroyed, and damaged Government property;

- (ii) the time and origin of the loss, destruction, or damage;
- (iii) all known interests in commingled property of which the Government property is a part; and
- (iv) the insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed directly), in accordance with the procedures provided for in the "Changes" clause of this contract.

- (4) With the approval of the Contracting Officer after loss or destruction of or damage to Government property, and subject to such conditions and limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like, sell for the account of the Government any item of Government property which has been damaged beyond practicable repair, or which is so commingled or combined with property of others, including the Contractor, that separation is impracticable.
- (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foregoing provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.
- (6) In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the Government property, caused by an excepted peril, he shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of or damage to the Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government.
- (h) Access. The Government, and any persons designated by it, shall at all reasonable times have access to the premises wherein any Government property is located, for the purpose of inspecting the Government property.
- (i) Final Accounting and Disposition of Government Property. Upon the completion of this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property not consumed in the performance of this contract (including any resulting scrap) or not theretofore delivered to the Government, and shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid in such other manner as the Contracting Officer may direct.
- (j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:
- (i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and
- (ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above.

(k) <u>Communications</u>. All communications issued pursuant to this clause shall be in writing or in accordance with the "Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors" (Appendix H, Armed Services Procurement Regulation).

7. EXAMINATION OF RECORDS

- (a) The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under this contract or of the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier, have access to and the right to examine any books, documents, papers, and records of the Contractor, that directly pertain to, and involve transactions relating to this contract or subcontracts hereunder.
- (b) The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until expiration of three years after final payment under the subcontract or of the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier, have access to and the right to examine any books, documents, papers, and records of such subcontractor that directly pertain to, and involve transactions relating to the subcontract. The term "subcontract" as used in the clause excludes: (i) purchase orders not exceeding \$2,500 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

8. TERMINATION FOR CONVENIENCE OF THE GOVERNMENT

- (a) The performance of work under this contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part, whenever the Contracting Officer shall determine that such termination is in the best interest of the Government. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.
- (b) After receipt of a Notice of Termination, and except as otherwise directed by the Contracting Officer, the Contractor shall:
- (i) stop work under the contract on the date and to the extent specified in the Notice of Termination;
- (ii) place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the contract as is not terminated:
- (iii) terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;
- (iv) assign to the Government, in the manner, at the times, and to the extent directed by the Contracting Officer, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
- (v) settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final for all the purposes of this clause:
- (vi) transfer title and deliver to the Government, in the manner, at the times, and to the extent, if any, directed by the Contracting Officer, (A) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (B) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would have been required to be furnished to the Government;
- (vii) use his best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Contracting Officer, any property of the types referred to in (vi) above; provided, however, that the Contractor (A) shall not be required to

extend credit to any purchaser, and (B) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Contracting Officer; and provided, further, that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Government to the Contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the Contracting Officer may direct;

- (viii) complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and
- (ix) take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the Government has or may acquire an interest.

At any time after expiration of the plant clearance period, as defined in Section VIII, Armed Services Procurement Regulation, as it may be amended from time to time, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer, and may request the Government to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the Government will accept title to such items and remove them or enter into a storage agreement covering the same; provided, that the list submitted shall be subject to verification by the Contracting Officer upon removal of the items, or if the items are stored, within forty five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

- (c) After receipt of a Notice of Termination, the Contractor shall submit to the Contracting Officer his termination claim, in the form and with certification prescribed by the Contracting Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Contracting Officer, upon request of the Contractor made in writing within such one year period or authorized extension thereof. However, if the Contracting Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Contracting Officer may, subject to any Settlement Review Board approvals required by Section VIII of the Armed Services Procurement Regulation in effect as of the date of execution of this contract, determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.
- (d) Subject to the provisions of paragraph (c), and subject to any Settlement Review Board approvals required by Section VIII of the Armed Services Procurement Regulation in effect as of the date of execution of this contract, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this clause, which amount or amounts may include a reasonable allowance for profit on work done; provided, that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. The contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in paragraph (e) of this clause, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Contracting Officer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this paragraph (d).
- (e) In the event of the failure of the Contractor and the Contracting Officer to agree as provided in paragraph (d) upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, the Contracting Officer shall, subject to any Settlement Review Board approvals required by Section VIII of the Armed Services Procurement Regulation in effect as of the date of execution of this contract, pay to the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed upon in accordance with paragraph (d):
- (i) for completed supplies accepted by the Government (or sold or acquired as provided in paragraph (b)(vii) above) and not theretofore paid for, a sum equivalent to the aggregate price for such supplies computed in accordance with the price or prices specified in the contract, appropriately adjusted for any saving of freight or other charges;

(ii) the total of --

- (A) the costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but exclusive of any costs attributable to supplies paid or to be paid for under paragraph (e)(i) hereof;
- (B) The cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in paragraph (b)(v) above, which are properly chargeable to the terminated portion of the contract (exclusive of amounts paid or payable on account of supplies or materials delivered or services furnished by subcontractors or vendors prior to the effective date of the Notice of Termination, which amounts shall be included in the costs payable under (A) above; and
- (C) a sum, as profit on (A) above, determined by the Contracting Officer pursuant to 8-303 of the Armed Services Procurement Regulation, in effect as of the date of execution of this contract, to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, no profit shall be included or allowed under this subdivision (C) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and
- (iii) the reasonable costs of settlement, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to this contract.

The total sum to be paid to the Contractor under (i) and (ii) of this paragraph (e) shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. Except for normal spoilage, and except to the extent that the Government shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor as provided in (e)(i) and (ii)(A) above, the fair value, as determined by the Contracting Officer, of property which is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government, or to a buyer pursuant to paragraph (b)(vii).

- (f) Any determination of costs under paragraph (c) or (e) hereof shall be governed by the principles for consideration of costs set forth in Section XV, Part 2, of the Armed Services Procurement Regulation, as in effect on the date of this contract.
- (g) The Contractor shall have the right of appeal, under the clause of this contract entitled "Disputes," from any determination made by the Contracting Officer under paragraph (c) or (e) above, except that if the Contractor has failed to submit his claim within the time provided in paragraph (c) above and has failed to request extension of such time, he shall have no such right of appeal. In any case where the Contracting Officer has made a determination of the amount due under paragraph (c) or (e) above, the Government shall pay to the Contractor the following: (i) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Contracting Officer, or (ii) if an appeal has been taken, the amount finally determined on such appeal.
- (h) In arriving at the amount due the Contractor under this clause there shall be deducted (i) all unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this contract, (ii) any claim which the Government may have against the Contractor in connection with this contract, and (iii) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the Government.
- (i) If the termination hereunder be partial, prior to the settlement of the terminated portion of this contract, the Contractor may file with the Contracting Officer a request in writing for an equitable adjustment of the price or prices specified in the contract relating to the continued portion of the contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices.
- (j) The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this contract whenever in the opinion of the Contracting

Officer the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the Contractor to the Government upon demand, together with interest computed at the rate of 6 percent per annum, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the Government; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or such later date as determined by the Contracting Officer by reason of the circumstances.

(k) Unless otherwise provided for in this contract, or by applicable statute, the Contractor, from the effective date of termination and for a period of three years after final settlement under this contract, shall preserve and make available to the Government at all reasonable times at the office of the Contractor but without direct charge to the Government, all his books, records, documents, and other evidence bearing on the costs and expenses of the Contractor under this contract and relating to the work terminated hereunder, or, to the extent approved by the Contracting Officer, photographs, micro-photographs, or other authentic reproductions thereof.

9. DISPUTES

- (a) Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.
- (b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above; provided, that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.
- 10. MILITARY SECURITY REQUIREMENTS
- (a) The provisions of this clause shall apply to the extent that this contract involves access to information classified "Confidential" including "Confidential -- Modified Handling Authorized" or higher.
- (b) The Government shall notify the Contractor of the security classifications of this contract and the elements thereof, and of any subsequent revisions in such security classification, by the use of a Security Requirements Check List (DD Form 254), or other written notification.
- (c) To the extent the Government has indicated as of the date of this contract or thereafter indicates security classification under this contract as provided in paragraph (b) above, the Contractor shall safeguard all classified elements of this contract and shall provide and maintain a system of security controls within his own organization in accordance with the requirements of —
- (i) the Security Agreement (DD Form 441), including the Department of Defense Industrial Security Manual for Safeguarding Classified Information as in effect on the date of this contract, and any modification to the Security Agreement for the purpose of adapting the Manual to the Contractor's business; and
- (ii) any amendments to said Manual made after the date of this contract, notice of which has been furnished to the Contractor by the Security Office of the Military Department having security cognizance over the facility.
- (d) Representatives of the Military Department having security cognizance over the facility and representatives of the contracting Military Department shall have the right to inspect at reasonable intervals the procedures, methods, and facilities utilized by the Contractor in complying

with the security requirements under this contract. Should the Government, through these representatives, determine that the Contractor is not complying with the security requirements of this contract the Contractor shall be informed in writing by the Security Office of the cognizant Military Department of the proper action to be taken in order to effect compliance with such requirements.

- (e) If, subsequent to the date of this contract, the security classifications or security requirements under this contract are changed by the Government as provided in this clause and the security costs or time required for delivery under this contract are thereby increased or decreased, the contract price, delivery schedule, or both, and any other provision of the contract that may be affected, shall be subject to an equitable adjustment by reason of such increased or decreased costs. Any equitable adjustment shall be accomplished in the same manner as if such changes were directed under the "Changes" clause in this contract.
- (f) The Contractor agrees to insert in all subcontracts hereunder which involve access to classified information, provisions which shall conform substantially to the language of this clause, including this paragraph (f) but excluding the last sentence of paragraph (e) of this clause.
- (g) The Contractor also agrees that he shall determine that any subcontractor proposed by him for the furnishing of supplies and services which will involve access to classified information in the Contractor's custody has been granted an appropriate facility security clearance, which is still in effect, prior to being accorded access to such classified information.

11. RENEGOTIATION

- (a) To the extent required by law, this contract is subject to the Renegotiation Act of 1951 (50 U.S.C. App. 1211, et seq.), as amended, and to any subsequent act of Congress providing for the renegotiation of contracts. Nothing contained in this clause shall impose any renegotiation obligation with respect to this contract or any subcontract hereunder which is not imposed by an act of Congress heretofore or hereafter enacted. Subject to the foregoing this contract shall be deemed to contain all the provisions required by section 104 of the Renegotiation Act of 1951, and by any such other act, without subsequent contract amendment specifically incorporating such provisions.
- (b) The Contractor agrees to insert the provisions of this clause, including this paragraph (b), in all subcontracts, as that term is defined in section 103g of the Renegotiation Act of 1951, as amended.

12. EQUAL OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigations to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, littlgation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

13. CONTRACT WORK HOURS STANDARDS ACT - OVERTIME COMPENSATION

This contract, to the extent that it is of a character specified in the Contract Work Hours Standards Act (40 U.S.C. 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

- (a) Overtime Requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours of such workweek on work subject to the provisions of the Contract Work Hours Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.
- (b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of his standard workweek of forty hours without payment of the overtime wages required by paragraph (a).
- (c) Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).
- (d) <u>Subcontracts.</u> The Contractor shall insert paragraphs (a) through (d) of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.
- (e) Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three years from the completion of the contract.

14. CONVICT LABOR

In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment at hard labor.

15. BUY AMERICAN ACT

- (a) In acquiring end products, the Buy American Act (41 U.S.C. 10a-d) provides that the Government give preference to domestic source end products. For the purpose of this clause:
- "components" means those articles, materials, and supplies, which are directly incorporated in the end products;
- "end products" means those articles, materials, and supplies, which are to be acquired under this contract for public use; and
- (iii) a "domestic source end product" means (A) an unmanufactured end product which has been mined or produced in the United States and (B) an end product manufactured in the United States if the cost of the components thereof which are mined, produced, or manufactured in the United States or Canada exceeds 50 percent of the cost of all of its components. For the purposes of this (a)(iii)(B), components of foreign origin of the same type or kind as the products referred to in (b)(ii) or (iii) of this clause shall be treated as components mined, produced, or manufactured in the United States.
- (b) The Contractor agrees that there will be delivered under this contract only domestic source (i)
 - which are for use outside the United States;
- which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;
- (iii) as to which the Secretary determines the domestic preference to be inconsistent with the public interest; or
 - as to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954. So as to alleviate the impact of Department of Defense expenditures on the United States balance of international payments, bids offering domestic source end products normally will be evaluated against bids offering other end products by adding a factor of fifty percent (50%) to the latter, exclusive of import duties. Details of the evaluation procedure are set forth in Section VI of the Armed Services Procurement Regulation.) 16. DEFAULT

- (a) The Government may, subject to the provisions of paragraph (c) of this clause, by written Notice of Defaults to the Contractor terminate the whole or any part of this contract in any one
- if the Contractor fails to perform the work called for by this contract within the time(s) specified herein or any extension thereof; or
- (ii) if the Contractor fails to perform any of the other provisions of this contract, or so fails to prosecute the work as to endanger performance of this contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.
- (b) In the event the Government terminates this contract in whole or in part as provided in paragraph (a) of this clause, the Government may procure, upon such terms and in such manner as the Contracting Officer may deem appropriate, work similar to the work so terminated and the Contractor shall be liable to the Government for any excess costs for such similar work; provided, that the Contractor shall continue the performance of this contract to the extent not terminated

- (c) Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or service to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule or other performance requirements.
 - (d) If this contract is terminated as provided in paragraph (a) of this clause, the Government, in addition to any other rights provided in this clause, may require the Contractor to transfer title and deliver to the Government, in the manner and to the extent directed by the Contracting Officer any of the completed or partially completed work not theretofore delivered to, and accepted by, the Government and any other property, including contract rights, specifically produced or specifically acquired for the performance of such part of this contract as has been terminated; and the Contractor shall, upon the direction of the Contracting Officer, protect and preserve property in the possession of the Contractor in which the Government has an interest. The Government shall pay to the Contractor the contract price, if separately stated, for completed work accepted by the Government and the amount agreed upon by the Contractor and the Contracting Officer for (i) completed work for which no separate price is stated, (ii) partially completed work, (iii) other property described above which is accepted by the Government, and (iv) the protection and preservation of property. Failure to agree shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." The Government may withhold from amounts otherwise due the Contractor for such completed supplies or manufacturing materials such sum as the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.
 - (e) If, after notice of termination of this contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the Government, be the same as if the notice of termination had been issued pursuant
 - (f) The rights and remedies of the Government provided in this clause shall not be exclusive and to such clause. are in addition to any other rights and remedies provided by law or under this contract.

17. PRIORITIES, ALLOCATIONS, AND ALLOTMENTS

The Contractor shall follow the provisions of DMS Reg. 1 and all other applicable regulations and orders of the Business and Defense Services Administration in obtaining controlled materials and other products and materials needed to fill this order.

18. UTILIZATION OF SMALL BUSINESS CONCERNS

- (a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with small business
- (b) The Contractor agrees to accomplish the maximum amount of subcontracting to small business concerns that the Contractor finds to be consistent with the efficient performance of this con-

19. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage,

or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violaagencies maintained by the combination for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee. 21. CRATUITIES

- (a) The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract; provided, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.
- (b) In the event this contract is terminated as provided in paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any
- (c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

22. AUTHORIZATION AND CONSENT

The Government hereby gives its authorization and consent for all use and manufacture of any invention described in and covered by a patent of the United States in the performance of this contract or any part hereof or any amendment hereto or any subcontract hereunder (including any lower-

23. CHANGES

The Contracting Officer may at any time, by a written order, and without notice to the sureties, if any, make changes within the general scope of this contract, in any one or more of the following: (i) drawings, designs, or specifications; (ii) method of shipment or packing; and (iii) place of inspection, delivery, or acceptance. If any such change causes an increase or decrease in the cost of, or the time required for performance of, this contract, or otherwise affects any other provisions of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made (i) in the contract price or time of performance, or both, and (ii) in such other provisions of the contract as may be so affected, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of receipt by the Contractor of the notification of change; provided, however, that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

24. FILING OF PATENT APPLICATIONS

(a) Before filing or causing to be filed a patent application in the United States disclosing any subject matter of this contract, which subject matter is classified "Secret" or higher, the Contractor shall, citing the thirty (30) days provision below, transmit the proposed application to the Contracting Officer for determination whether, for reasons of national security, such application should be placed under an order of secrecy or sealed in accordance with the provisions of 35 U.S.C. 181-188 or the issuance of a patent should be otherwise delayed under pertinent United States statutes or regulations; and the Contractor shall observe any instructions of the Contracting Officer with respect to the manner of delivery of the patent application to the United States Patent Office for filing, but the Contractor shall not be denied the right to file such

patent application. If the Contracting Officer shall not have given any such instructions within thirty (30) days from the date of mailing or other transmittal of the proposed application, the Contractor may file the application.

- (b) The Contractor shall furnish to the Contracting Officer, at the time of or prior to the time when the Contractor files or causes to be filed a patent application in the United States disclosing any subject matter of this contract, which subject matter is classified "Confidential," a copy of such application for determination whether, for reasons of national security, such application should be placed under an order of secrecy or the issuance of a patent should be otherwise delayed under pertinent United States statutes or regulations.
- (c) Where the subject matter of this contract is classified for reasons of security, the Contractor shall not file, or cause to be filed in any country, other than in the United States as provided in (a) and (b) of this clause, an application or registration for a patent containing any of said subject matter without first obtaining written approval of the Contracting Officer.
- (d) When filing any patent application coming within the scope of this clause, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter, and shall also promptly furnish to the Contracting Officer the serial number, filing date, and name of country of any such patent application. When transmitting the application to the United States Patent Office, the Contractor shall by separate letter identify by agency and number the contract or contracts which require security classification markings to be placed on the application.
- 25. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

The provisions of this clause shall be applicable only if the amount of this contract exceeds

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable \$10,000. written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.
 - (c) This clause shall be included in all subcontracts.

26. STANDARDS OF WORK

The Contractor agrees that the performance of work and services pursuant to the requirements of this contract shall conform to high professional standards.

The Government, through any authorized representatives, has the right, at all reasonable times, to inspect, or otherwise evaluate the work performed or being performed hereunder and the premises in which it is being performed. If any inspection, or evaluation is made by the Government on the premises of the Contractor or a subcontractor, the Contractor shall provide and shall require his subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work.

28. WALSH-HEALEY PUBLIC CONTRACTS ACT

If this contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed \$10,000 and is otherwise subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S.C. 35-45), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations and stipulations being subject to all applicable by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

29. UTILIZATION OF CONCERNS IN LABOR SURPLUS AREAS

It is the policy of the Government to place contracts with concerns which will perform such contracts substantially in or near sections of concentrated unemployment or underemployment as a certified-eligible concern or in areas of persistent or substantial labor surplus where this can be done, consistent with the efficient performance of the contract, at prices no higher than are obtainable elsewhere. The Contractor agrees to use his best efforts to place his subcontracts in accordance with this policy. In complying with the foregoing and with paragraph (b) of the clause accordance with this policy. In complying with the foregoing and with paragraph (b) of the clause of this contract entitled "Utilization of Small Business Concerns," the Contractor in placing his subcontracts shall observe the following order of preference: (i) certified concerns which are also small business concerns; (ii) other certified concerns; (iii) persistent labor surplus area concerns which are also small business concerns; (iv) other persistent labor surplus area concerns. (v) substantial labor surplus area concerns; (vi) cerns; (v) substantial labor surplus area concerns which are also small business concerns; (vi) other substantial labor surplus area concerns; and (vii) small business concerns which are not labor surplus area concerns.

30. INTEREST

Notwithstanding any other provision of this contract, unless paid within 30 days all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code) shall bear interest at the rate of six percent per annum from the date due until paid and shall be subject to adjustments as provided by Part 6 of Appendix E of the Armed Services Procurement Regulation, as in effect on the date of this contract. Amounts shall be due upon the earliest one of (i) the date fixed pursuant to this contract; (ii) the date of the first written demand for payment, consistent with this contract, including demand consequent upon default termination; (iii) the date of transmittel by the Government to the Contractor of a proposed supplemental agreement to confirm completed negotiations fixing the amount; or (iv) if this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or in connection with a negotiated pricing agreement not confirmed by contract supplement.

31. COMPETITION IN SUBCONTRACTING

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

32. TECHNICAL DATA - WITHHOLDING OF PAYMENT

If "Technical Data" (as defined in the clause of this contract entitled "Rights in Technical Data"), or any part thereof, is not delivered within the time specified by this contract or is deficient upon delivery (including having restrictive markings not specifically authorized by this contract), the Contracting Officer may, until such data is delivered or deficiencies are corrected, withhold payment to the Contractor of ten percent (10%) of the contract price unless a lesser withholding is specified in the Schedule. Payments shall not be withheld nor any other action taken pursuant to this clause where the Contractor's failure to make timely delivery or to deliver such data without deficiencies arises out of causes beyond the control and without the fault or negligence of the Contractor within the meaning of the clause hereof entitled "Default." The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract.

33. LIMITATION ON WITHHOLDING OF PAYMENTS

If more than one clause or Schedule provision of this contract authorizes the temporary withholding of amounts otherwise payable to the Contractor for supplies delivered or services performed, the total of the amounts so withheld at any one time shall not exceed the greatest amount which may be withheld under any one such clause or Schedule provision at that time; provided, that this

- withholdings pursuant to any clause relating to wages or hours of employees; (i) -(ii)
- withholdings not specifically provided for by this contract; and
- (iii) the recovery of overpayments.

- (a) For purposes of verifying that certified cost or pricing data submitted, in conjunction with 34. AUDIT the negotiation of this contract or any contract change or other modification involving an amount the negotiation of this contract or any contract change or other modification involving an amount in excess of \$100,000, were accurate, complete, and current, the Contracting Officer, or his authorized representatives, shall — until the expiration of three years from the date of final authorized representatives, shall — until the expiration of three years from the Armed Services payment under this contract or for the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier -- have the right to examine those books, records, documents, papers and other supporting data which involve transactions related to this contract or which will permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.
- (b) The Contractor agrees to insert this clause including this paragraph (b) in all subcontracts hereunder which when entered into exceed \$100,000, so as to apply until the expiration of three years from the date of final payment under the subcontract or for the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier, unless the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. When so inserted, changes shall be made to designate the higher-tier subcontractor at the level When so inserted, changes shall be made to designate the higher—tier subcontractor at the level involved as the contracting and certifying party; to add "of the Government prime contract" after "Contracting Officer"; and to add, at the end of (a) above, the words, "provided that, in the case of any contract change or modification, such change or modification results from a change or other modification to the Government prime contract." In each such excepted subcontract hereunder which when entered into exceeds \$100,000, the Contractor shall insert the following clause to apply until the expiration of three years from the date of final payment under the subcontract or apply until the expiration of three years from the date of final payment under the subcontract or approximate one expression of one of years from one date of final payment under one supported to the for the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier.

AUDIT - PRICE ADJUSTMENTS

- (a) This clause shall become operative only with respect to any change or other modification of this contract which involves a price adjustment in excess of \$100,000 unless the price adjustment is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation; provided, that such change or other modification to this contract results from a change or other modification to the Government prime contract.
- (b) For purposes of verifying that certified cost or pricing data submitted in conjunction with such a contract change or modification were accurate, complete and current, the Contracting Officer of the Government prime contract or his authorized representative shall - until the expiration of three years from the date of final payment under this contract or for the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier - have the right to examine those books, records, documents, papers and other supporting data which involve transactions related to this contract or which will permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections
- (c) The Subcontractor agrees to insert this clause, including this paragraph (c) in used therein. all subcontracts hereunder which when entered into exceed \$100,000, so as to apply until the expiration of three years from the date of final payment of the subcontract or for the time periods specified in Appendix M of the Armed Services Procurement Regulation, whichever expires earlier.

35. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA

(a) If any price, including profit or fee, negotiated in connection with this contract or any cost reimbursable under this contract was increased by any significant sums because the Contractor, or any subcontractor pursuant to the clause of this contract entitled "Subcontractor Cost or Pricing Data" or "Subcontractor Cost or Pricing Data -- Price Adjustments" or any subcontract clause therein required, furnished incomplete or inaccurate cost or pricing data or data not current as certified in the Contractor's Certificate of Current Cost or Pricing Data, then such price or cost shall be reduced accordingly and the contract shall be modified in writing as may be necessary to reflect such reduction.

(b) Failure to agree on a reduction shall be a dispute concerning a question of fact within the meaning of the "Disputes" clause of this contract.

(Note: Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. However, the inclusion of such a clause and the terms thereof are matters for negotiation and agreement between the Contractor and the subcontractor, provided that they are consistent with ASPR 23-203 relating to Disputes provisions in subcontracts. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted

36. SUBCONTRACTOR COST AND FRICING DATA

- (a) The Contractor shall require subcontractors hereunder to submit cost or pricing data under the following circumstances: (i) prior to award of any cost-reimbursement type, incentive, or price redeterminable subcontract; (ii) prior to the award of any subcontract the price of which is expected to exceed \$100,000; (iii) prior to the pricing of any subcontract change or other modification. cation for which the price adjustment is expected to exceed \$100,000; except in the case of (ii) or (iii) where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by
- (b) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief, the cost and pricing data submitted under (a) above is accurate, complete, and current as of the date of execution, which date shall be as close as possible to the date of
- (c) The Contractor shall insert the substance of this clause including this paragraph (c) in each of his cost-reimbursement type, price redeterminable, or incentive subcontracts hereunder, and in any other subcontract hereunder which exceeds \$100,000 except where the price thereof is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. In each such excepted subcontract hereunder in excess of \$100,000, the Contractor shall insert the substance of

SUBCONTRACTOR COST AND PRICING DATA -- PRICE ADJUSTMENTS

- (a) Paragraphs (b) and (c) of this clause shall become operative only with respect to any change or other modification made pursuant to one or more provisions of this contract which involves a price adjustment in excess of \$100,000. The requirements of this clause shall be limited to such price adjustments.
- (b) The Contractor shall require subcontractors hereunder to submit cost or pricing data under the following circumstances: (i) prior to award of any cost-reimbursement type, incentive or price redeterminable subcontract; (ii) prior to award of any subcontract, the price of which is expected to exceed \$100,000; (iii) prior to the pricing of any subcontract change or other modification for which the price adjustment is expected to exceed \$100,000; except, in the case of (ii) or (iii), where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or
- (c) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief the cost and pricing data submitted under (b) above is accurate, complete, and current as of the date of execution, which date shall be as close as possible to the date of agreement on the negotiated price of the contract modification.
- (d) The Contractor shall insert the substance of this clause including this paragraph (d) in each subcontract hereunder which exceeds \$100,000.

37. RIGHTS IN TECHNICAL DATA

- (1) Technical Data, as used in this clause, means technical writing, sound recordings, pictorial reproductions, drawings, or other graphic representations and works of a technical nature, whether or not copyrighted, which are specified to be delivered pursuant to this contract. The term does not include financial reports, cost analyses, and other information incidental to contract administration.
- (2) Limited Rights means rights to use, duplicate, or disclose technical data, in whole or in part, by or for the Government, with the express limitation that such technical data shall not, without the written permission of the party furnishing such technical data, be (a) released or disclosed in whole or in part outside the Government, (b) used in whole or in part by the Government for manufacture, or (c) used by a party other than the Government, except for:
- emergency repair or overhaul work only, by or for the Government, where the item or process concerned is not otherwise reasonably available to enable timely performance of the work; provided, that the release or disclosure thereof outside the Government shall be made subject to a prohibition against further use, release or disclosure; or
- (ii) release to a foreign government, as the interest of the United States may require, only for information or evaluation within such government or for emergency repair or overhaul work by or for such government under the conditions of (i) above.
- (3) Unlimited Rights means rights to use, duplicate or disclose technical data, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so.

(b) Government Rights.

- (1) The Government shall have unlimited rights in:
- technical data resulting directly from performance of experimental, developmental or research work which was specified as an element of performance in this or any other Government contract or subcontract;
- (ii) technical data necessary to enable manufacture of end-items, components and modifications, or to enable the performance of processes, when the end-items, components, modifications or processes have been, or are being, developed under this or any other Government contract or subcontract in which experimental, developmental or research work is, or was specified as an element of contract performance, except technical data pertaining to items, components or processes developed at private expense (but see (2)(ii) below);
 - (iii) technical data constituting corrections or changes to Government-furnished data;
- technical data pertaining to end-items, components or processes which was prepared for the purpose of identifying sources, size, configuration, mating and attachment characteristics, functional characteristics and performance requirements ("form, fit and function" data, e.g., specification control drawings, catalog sheets, envelope drawings, etc.);
- manuals or instructional materials prepared for installation, operation, maintenance or training purposes;
- other technical data which has been, or is normally furnished without restriction by the Contractor or subcontractor; and (vi)
- (vii) technical data listed or described in an agreement incorporated into the Schedule of this contract, which the parties have predetermined, on the basis of subparagraphs (1) through (vi) above, and agreed will be furnished with unlimited rights.
 - (2) The Covernment shall have limited rights in:
- technical data, listed or described in an agreement incorporated into the Schedule of this contract, which the parties have agreed will be furnished with limited rights; and

(ii) technical data pertaining to items, components or processes developed at private expense, other than such data as may be included in the data referred to in (b)(1)(i), (iii), (iv), and (vi);

provided, that each piece of data to which limited rights are to be asserted pursuant to (2)(i) and (ii) above is marked with the following legend in which is inserted the number of the prime contract under which the technical data is to be delivered and the name of the Contractor or subcontractor by whom the technical data was generated:

Whis technical data, furnished under United States Government Contract No. _______, shall not, without the written permission of be either (a) used, released or disclosed in whole or in part outside the Government, (b) used in whole or in part by the Government for manufacture or (c) used by a party other than the Government, except for: (i) emergency repair or overhaul work only, by or for the Government, where the item or process concerned is not otherwise reasonably available to enable timely performance of the work; provided, that the release or disclosure hereof outside the Government shall be made subject to a prohibition against further use, release, or disclosure; or (ii) release to a foreign government, as the interest of the United States may require, only for information or evaluation within such government or for emergency repair or overhaul work by or for such government under the conditions of (i) above. This legend shall be marked on any reproduction hereof in whole or in part."

No legend shall be marked on, nor shall any limitation on rights of use be asserted as to, any data which the Contractor has previously delivered to the Government without restriction. The limited rights provided for by this paragraph (b)(2) shall not impair the right of the Government to use similar or identical data acquired from other sources.

(c) Material Covered by Copyright.

- (1) Notwithstanding the provisions of (b) above, the Contractor agrees to and does hereby grant to the Government, and to its officers, agents, and employees acting within the scope of their official duties, a royalty-free, nonexclusive and irrevocable license throughout the world for Government purposes to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others so to do, all technical data now or hereafter covered by copyright.
- (2) No such copyrighted matter shall be included in technical data furnished hereunder without the written permission of the copyright owner for the Government to use such copyrighted matter in the manner described above.
- (3) The Contractor shall report to the Government (or higher-tier Contractor) promptly and in reasonable written detail each notice or claim of copyright infringement received by the Contractor with respect to any technical data delivered hereunder.
- (d) <u>Removal of Unauthorized Markings</u>. Notwithstanding any provisions of this contract concerning inspection and acceptance, the Government may modify, remove, obliterate, or ignore any marking not authorized by the terms of this contract on any technical data furnished hereunder if —
- (i) the Contractor fails to respond within sixty (60) days to a written inquiry by the Government concerning the propriety of the use of the marking. or
- (ii) the Contractor's response fails to substantiate his contention that the use of the marking is authorized, in which case the Government shall give written notice to the Contractor.
- (e) <u>Relation to Patents.</u> Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government under any patent.
- (f) Limitation on Charges for Data. The Contractor recognizes that the Government, or a foreign government with funds derived through the Military Assistance Program or otherwise through the United States Government, may contract for property or services with respect to which the vendor may be liable to the Contractor for charges for the use of technical data on account of such a contract. The Contractor further recognizes that it is the policy of the Government not to pay in connection with its contracts, or to allow to be paid in connection with contracts made with funds

derived through the Military Assistance Program or otherwise through the United States Government, charges for data which the Government has a right to use and disclose to others, which is in the public domain, or which the Government has been given without restrictions upon its use and disclosure to others. This policy does not apply to reasonable reproduction, handling, mailing, and similar administrative costs incident to the furnishing of such data. In recognition of this policy, the Contractor agrees to participate in and make appropriate arrangements for the exclusion of such charges from such contracts, or for the refund of amounts received by the Contractor with respect to any such charges not so excluded.

(g) Acquisition of Data from Subcontractors.

- (1) Whenever any technical data is to be obtained from a subcontractor under this contract, the Contractor shall use this same clause in the subcontract, without alteration, and no other clause shall be used to enlarge or diminish the Government's or the Contractor's rights in that subcontractor data which is required for the Government.
- (2) Technical data required to be delivered by a subcontractor shall normally be delivered to the next higher-tier Contractor. However, when there is a requirement in the prime contract, or in the deferred order, for data which may be supplied with limited rights pursuant to (b)(2) above, a subcontractor may fulfill such requirement by submitting such data directly to the Government rather than through the prime Contractor.
- (3) The Contractor and higher-tier subcontractors will not use their power to award subcontracts as economic leverage to acquire rights in data from their subcontractors for themselves.
- (h) (1) Unless the Schedule provides otherwise, and subject to (2) below, the Contractor will promptly notify the Contracting Officer in writing of the intended use by the Contractor or a subcontractor in performance of this contract of any item, component or process for which data called for by this contract, suitable for competitive procurement, would fall within paragraph (b)(2) above (<u>i.s.</u>, if and when furnished, might be furnished with limited rights).
 - (2) Such notification is not required with respect to:
- standard commercial items which are manufactured by more than one source of (i) supply; or
- items, components or processes for which such notice was given pursuant to predetermination of rights in data in connection with this contract.
- (3) Contracting Officer approval is not necessary under this clause for the Contractor to use the item, component or process in the performance of the contract.

38. WARRANTY OF TECHNICAL DATA

- (a) Technical data, as used in this clause, refers to recorded information required to be delivered under this contract used to define a design and to produce, support, maintain, or operate items of defense materiel. These data may be recorded as graphic or pictorial delineations in media such as drawings or photographs; text in specifications or related performance or designtype documents; in machine forms such as punched cards, magnetic tape, computer memory printouts; or may be retained in computer memory. Examples of recorded information include engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. For purposes of this clause, research and engineering data are included but financial and administrative data are excluded.
- (b) Notwithstanding inspection and acceptance by the Government of technical data furnished under this contract and notwithstanding any provision of this contract concerning the conclusiveness thereof, the Contractor warrants that all technical data delivered under this contract will at the time of delivery conform with the specifications and all other requirements of this contract. The warranty period shall extend for three years after completion of the delivery of the line item of data (as identified in DD Form 1423) of which the data forms a part; or any longer period specified in the contract.
- (c) The Contractor agrees to notify the Contracting Officer in writing immediately of any breach of the above warranty which the Contractor discovers within the warranty period.

- (d) The following remedies shall apply to all breaches of the above warranty provided that the Government notifies the Contractor of the breach in writing within the warranty period.
- (1) Within a reasonable time after the Contracting Officer notifies the Contractor of a breach of warranty, he may:
- (i) by written notice, direct the Contractor to correct or replace the nonconforming technical data promptly; or
- (ii) if he determines that the Government no longer has a requirement for correction or replacement of the data, or that the data can be more reasonably corrected by the Government, inform the Contractor by written notice that the Government elects a price or fee adjustment in lieu of correction or replacement.
- (2) If the Contractor refuses or fails to comply with a direction under (1)(i) above, the Contracting Officer may, within a reasonable time of such refusal or failure:
- (i) by contract or otherwise, correct or replace the nonconforming technical data and charge the Contractor the cost occasioned to the Covernment thereby; or
 - (ii) elect a price or fee adjustment in lieu of correction or replacement.
- (3) In addition to the remedies specified under (1) and (2) above, Contractor shall be liable to the Government for all damages sustained by the Government as a result of breach of the warranty specified in this clause; however, the additional liability under this subparagraph (3) shall not exceed 10% of the total contract price. If the breach of the warranty specified in (b) of this clause is with respect to data supplied by an equipment subcontractor, the limit of the prime Contractor's liability shall be 10% of the total subcontract price in the case of a firm fixed-price subcontract, 75% of the total subcontract fee in the case of a cost-plus-fixed-fee or cost-plus-award-fee subcontract, or 75% of the total subcontract target profit or fee in the case of a fixed-price or cost-plus-incentive-type contract. The additional liability specified in this paragraph (3) shall not apply:
- (i) with respect to the requirement under Category E or I of MIL-D-1000; provided, that the data furnished by the Contractor was current, accurate at time of submission, and did not involve a significant omission of data necessary to comply with such requirements; or
- (ii) with respect to specific defects as to which the Contractor discovers and gives written notice to the Government before the error is discovered by the Government.
- (e) The remedies set forth in this clause represent the exclusive means by which the rights conferred on the Government by this clause may be enforced.
- (f) The provisions of this clause apply anew to that portion of any technical data which is corrected or furnished in replacement under (d)(1)(i) above.

39. GOVERNMENT DELAY OF WORK

- (a) If the performance of all or any part of the work is delayed or interrupted by an act of the Contracting Officer in the administration of this contract, which act is not expressly or impliedly authorized by this contract, or by his failure to act within the time specified in this contract (or within a reasonable time if no time is specified), an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by such delay or interruption and the contract modified in writing accordingly. Adjustment shall be made also in the delivery or performance dates and any other contractual provision affected by such delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption (i) to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor; or (ii) for which an adjustment is provided or excluded under any other provision of this contract.
- (b) No claim under this clause shall be allowed (i) for any costs incurred more than twenty (20) days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved; and (ii) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such delay or interruption, but not later than the date of final payment under the contract.

40. FREQUENCY AUTHORIZATION

- (a) Authorization of radio frequencies required in support of this contract shall be obtained through the Contracting Officer by the Contractor or subcontractor in need thereof. Frequency management procedures prescribed in the Schedule of this contract shall be followed in obtaining radio frequency authorization.
- (b) For any experimental, developmental or operational equipment for which the appropriate frequency allocation has not been made, the Contractor or subcontractor shall provide the technical operating characteristics of the proposed electromagnetic radiating device to the Contracting Officer during the initial planning, experimental, or developmental phases of contractual performance. DD Form 1494, "Application for Frequency Allocation," shall be used for this purpose and shall be prepared in accordance with instructions contained on the form.
- (c) This clause, including this paragraph (c), shall be included in all subcontracts which call for developing, producing, testing, or operating a device for which a radio frequency authorization is required.

41. CARE OF LABORATORY ANIMALS

- (a) In the care of any experimental live animals (dogs, cats, non-human primates, guinea pigs, hamsters, or rabbits) used in the performance of this contract, the Contractor shall adhere to the principles enunciated in the "Guide for Laboratory Animal Facilities and Care" prepared by the Institute of Laboratory Animal Resources, National Academy of Sciences -- National Research Council, and in the publication "Laboratory Animal Welfare" prepared by the Agricultural Research Service, Department of Agriculture. In case of conflict between the standards in these publications, the higher standard shall be used.
- (b) The Contractor shall obtain necessary copies of the publications referenced in (a) above from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.
- (c) The Contractor shall acquire dogs and cats used in research and development programs from a person holding a valid dealer's license issued by the Secretary of Agriculture, except as exempted by Public Law 89-544, "Laboratory Animal Welfare Act," 24 August 1966.

42. TITLE AND RISK OF LOSS

- (a) Unless this contract specifically provides for earlier passage of title, title to supplies covered by this contract shall pass to the Government upon formal acceptance, regardless of when or where the Government takes physical possession.
- (b) (1) Unless this contract specifically provides otherwise, risk of loss of or damage to supplies covered by this contract shall remain with the Contractor until, and shall pass to the Government upon:
 - delivery of the supplies to a carrier, if transportation is f.o.b. origin; (i)
- acceptance by the Government or delivery of possession of the supplies to the Government at the destination specified in this contract, whichever is later, if transportation is f.o.b. destination.
- (2) Notwithstanding (1) above, the risk of loss of or damage to supplies which so fail to conform to the contract as to give a right of rejection shall remain with the Contractor until cure or acceptance, at which time (1) above shall apply.
- (c) Notwithstanding (b) above, the Contractor shall not be liable for loss of or damage to supplies caused by the negligence of officers, agents, or employees of the Government acting within the scope of their employment.

43. PATENT RIGHTS

The following provisions shall apply to the work to be performed under this contract:

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STANDARD FO GENERAL SERVIC FED. PROC. RE	RM 26, JULY 1966 SES ADMINISTRATI G. (41CFR) 1-16.10	NO.	AWARD/CONTRACT					PAGE OF			
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CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuotion sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such pravisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.) 23. NAME OF CONTRACTOR RANDOMING. Inc. 24. UNITED STATES OF AMERICA											
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24. NAME AND TITLE A. R. Zandi		•		March 1969	WED COME		PIEWE	DVTOR	PFSCA	tor print)	28. DATE SIGNED

CONTRACT NUMBER: NOO014-69-C-0181

SCHEDULE

SECTION A - BASIC CONTRACT IDENTIFICATION

This Schedule is established under, and constitutes a part of, Contract N00014-69-C-0181, consisting of: face page; Schedule; and General Provisions pages 1 through 32, identified as "C(P) - March 1967," with "Alterations" thereto. In the event of any inconsistency in this contract, the inconsistency shall be resolved by giving precedence in the following order: (a) the Schedule; (b) the General Provisions; (c) the other provisions of the contract whether incorporated by reference or otherwise; and (d) the Specifications.

SECTION B - SPECIFICATION OF WORK

Line Item No.	Supplies/Services	Amount
I.	The Contractor shall furnish the necessary personnel and facilities for and, in accordance with any instructions issued by the Scientific Officer or his authorized representative, shall study the effects of exposure to radio frequency energy and ionized air on performance.	(FIXED PRIÇE)
	EAM TITLE: BEHAVIORAL BIOPHYSICS	
	1AA - See Section E - 15 April 1969 1AB - See Section E - 15 June 1969 1AC - See Section E - 15 August 1969 1AD - See Section E - 15 October 1969 1AE - See Section E - 15 December 1969 1AF - See Section E - Upon completion of work	\$ 3,400.00 3,400.00 3,400.00 3,400.00 3,400.00 3,680.00
	Total Amount of Contract	\$20,680.00

2 Reports - See Section F

(Not Separately Priced)

SECTION C - PERIOD OF PERFORMANCE

The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1970.

SECTION D - SCIENTIFIC OFFICER

The Scientific Officer under this contract is the Head, Physiological Psychology Branch, Psychological Sciences Division, Office of Naval Research, Department of the Navy, Washington, D. C. 20360.

CONTRACT NUMBER: NOO014-69-C-0181

SCHEDULE

SECTION E - PRICE AND PAYMENTS

- (1) Except to the extent otherwise provided herein, the Government shall pay to the Contractor as full compensation for the performance of work hereunder, the total price specified in Item 21 on Page 1, hereof. Upon receipt of properly certified invoices, and a certification by the Contract Administrator that status (progress) reports have been submitted in accordance with Section F, hereof, payments shall be made, notwithstanding any provisions of clause 2 of the contract to the contrary, as specified herein; provided, however, that the final payment shall not be made until the Scientific Officer has received the final report from the Contractor and has certified receipt and acceptance thereof to the Contract Administrator.
- (2) The total contract price specified in this contract is based upon the understanding that the Contractor shall conduct the specified research program substantially in accordance with the proposal upon which this contract is based. In the event that the performance of work under this contract is not substantially in accordance with the underlying proposal, it is understood and agreed that the parties hereto shall negotiate an appropriate reduction in the contract price or an extension in the period of performance of this contract.

SECTION F - REPORTS

- (1) The Contractor shall submit not more than fifty (50) copies of status (progress) reports on the dates specified herein, and not more than one hundred (100) copies of a final technical report making full disclosures of all research conducted under this contract. The final technical report shall be distributed in accordance with a list approved and furnished to the Contractor by the Scientific Officer. With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In all technical reports (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract Authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.
- (2) The Contractor shall include a completed "Document Control Data R&D" form (DD Form 1473) as the last page of each copy of every scientific and technical report prepared under this contract. The form contains instructions for preparation. The cognizant Government Contract Administrator will provide assistance to the Contractor in obtaining the required forms. Administrative type reports, managerial (status) reports, and reprints submitted as technical reports are excluded from this requirement.

CONTRACT NUMBER: NOO014-69-C-0181

SCHEDULE

(3) Unless otherwise authorized in writing by the Contracting Officer, reports submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 single page reports or a total of 25,000 pages of a multiple-page report. To satisfy the requirements of the Defense Documentation Center, at least one copy of each technical report submitted to the Defense Documentation Center must be black typing or reproduction of black on white paper or suitable for reproduction by photographic techniques. Reprints of published technical articles are not within the scope of this paragraph (3).

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (1)

(a) <u>Definitions Used in This Clause</u>.

- (1) <u>Subject Invention</u> means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.
- (2) Governmental purpose means the right of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) Contract means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) Subcontract and subcontractor mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) Rights Granted to the Government. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

(c) Invention Disclosures and Reports.

(1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (2)

States, the Contractor shall furnish to the Contracting Officer:

- (i) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than three (3) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions;
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor;
- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (3)

(ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

(d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (ii) shall not proceed with the subcontract without the written authorization of the Contracting Officer.

The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.

(2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (4)

(e) Domestic Filing of Patent Applications by Contractor.

- (1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a petent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences. the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).
 - (2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

(f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
- (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (5)

translation of such application, and convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

(g) Withholding of Payment.

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(ii).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.
- (3) After payments total eighty percent (80%) of the amount of this contract, and if no amount is required to be withheld under (2) above, the Contracting Officer may, if he deems such action warranted because of the Contractor's performance under the Patent Rights clause of this contract or other known Government contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (6)

- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provision of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
- (h) Contractor's Request for Greater Rights. The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit in writing to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

(i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
- (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right to require the granting of a license to an applicant under any such Invention:
- (i) on a nonexclusive, royalty-free basis, unless the Contractor, has licensee, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues on such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should be retained for a further period of time; or

PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (7)

- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) Right to Disclose Subject Inventions. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) Forfeiture of Rights in Unreported Subject Inventions. The Contractor shall forfeit to the Government all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(iii) of this clause, whichever is later, provided that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was due entirely to causes beyond his control and without his fault or negligence. The Contractor shall be deemed to hold any such forfeited Subject Invention, and the patent applications and patents pertaining thereto, in trust for the Government pending written assignment of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to imreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.
- (1) Examination of Records Relating to Inventions. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

The following Alterations are hereby made in the General Provisions of this contract:

1. MODIFICATIONS

- (a) In clause 6, entitled "Government Property," make the following changes:
- (i) In paragraph (c), in the sixth line, delete the first word "of," and substitute in lieu thereof the word "or."
- (ii) Delete paragraph (d) in its entirety and substitute in lieu thereof the following:
- "(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the 'Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors' (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract."
- (iii) Delete paragraph (g) in its entirety and substitute in lieu thereof the following:

"(g) Risk of Loss.

- (1) Except for loss, destruction or damage resulting from a failure of the Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the maintenance, repair, protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:
- (i) caused by any peril while the property is in transit off the Contractor's premises; or
- (ii) caused by any of the following perils while the property is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils --
- (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandalism and malicious

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks; excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby rising of a body of water; nuclear reaction, nuclear radiation or radioactive contamination; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces; or by an agent of any such government, power, authority, or forces; or

(B) other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.

The perils as set forth in (i) and (ii) above are hereinafter called 'excepted perils.'

If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the Contractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

The term 'Contractor's managerial personnel' as used herein means the Contractor's directors, officers and any of his managers, superintendents, or other equivalent representatives who have supervision or direction of:

- (i) all or substantially all of the Contractor's business;
- (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which the contract is being performed; or
- (iii) a separate and complete major industrial operation in connection with the performance of this contract.
- (2) The Contractor represents that he is not including in the price hereunder, and agrees that he will not hereafter include in any price to the Government, any charge or reserve for insurance (including any self-insurance funds or reserve) covering loss or destruction of or damage to the Government property caused by any excepted peril.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

- (3) Upon the happening of loss or destruction of or damage to any Government property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
 - (i) the lost, destroyed, and damaged Government property;
 - (ii) the time and origin of the loss, destruction, or damage;
- (iii) all known interests in commingled property of which the Government property is a part; and
- (iv) the insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed directly), in accordance with the procedures provided for in the 'Changes' clause of this contract.

- (4) With the approval of the Contracting Officer after loss or destruction of or damage to Government property, and subject to such conditions and limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like, sell for the account of the Government any item of Government property which has been damaged beyond practicable repair, or which is so commingled or combined with property of others, including the Contractor, that separation is impracticable.
- (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foregoing provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

- (6) In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the Government property, caused by an excepted peril, he shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of or damage to the Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government."
- (iv) Delete paragraph (j) in its entirety and substitute in lieu thereof the following:
- "(j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:
- (i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and
- (ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above."

PRE-POST CLEARANCE MEMORANDUM

Contract Number: NOOOL4-69-C-0181

UNCLASSIFIED

Modification No: P00005

21 January 1972

NR 309-005/7-14-71 & 11-22-71

Physiological Psychology Programs Psychological Sciences Division

Randomline, Incorporated Old York and Moreland Roads 19010 Willow Grove, Pennsylvania

Negotiations ;

Randomline, Inc. has been conducting research on the effects of exposure to radio frequency energy and related subjects under fixed price contract NOCOL4-69-C-0181. Currently, said contract is scheduled to terminate on 14 February 1972 with a total fixed price of \$93,208.00. This office is in receipt of two proposals from the contractor requesting amounts of \$60,217.00 and \$24,633.00 to finance a one year extension of the research program. The cognizant Scientific Officer indicated his approval of an extension and submitted two procurement requests allocating the requested amounts. Under this contract the contractor is conducting two separate tasks being funded individually by ONR and NAVSHIPS. The NAVSHIPS supported program requires an additional expenditure of \$60,217.00. The contractor has provided a detailed breakdown of this amount. Salary rates quoted by the contractor are computed in accordance with the contractor's current salary policy and are considered acceptable. The contractor has budgeted overhead at the rate of 24% of direct costs which is the rate previously quoted and is considered acceptable. The contractor has requested a prefit of 7.8%. This is the profit currently in effect and is considered reasonable for a fixed price type contract. The ONR supported task requires additional expenditubes totaling \$24,633.00. Again, the salary rates are in accordance with the contractor's current salary policy and are considered acceptable. The contractor has budgeted overhead at 24% and requested a profit of 7.8% which are considered acceptable. The undersigned spoke with Mr. A. H. Frey of Randomline and a revised payment schedule was established for this modification.

Description of Work

The contract work statement is being revised to include updated research requirements.

Analysis of Price

There are attached hereto breakdowns in the amounts of \$24,633.00 and \$60,217.00, covering the period to 14 February 1973.

Contract Number: NOOO14-69-C-0181

Modification No: 05 Clearance Memo Continued

4. Authority and Reasonableness

Authority for the negotiation of the proposed modification is 10 U.S.C. 2304 (a)(11). D&F Number 44291, which cites 10 U.S.C. 2304(a)(11), has been prepared.

All negotiations for this procurement have been completed and this memorandum should suffice for both a pre-negotiation and post-negotiation clearance memorandum.

In the opinion of the undersigned, the terms and conditions of the proposed modification appear to be fair, reasonable and in the interest of the Government.

DAVID A. RODGERS, Contract Negotiator

APPROVED BY

(Janto, War

RANDOMLINE, INC. OLD YORK & MORELAND ROADS WILLOW GROVE, PENNA, 19090 (215) OL 0-6228

Budget

Professional (senior) 12 MM @ 1754/mo 21,048 Technician 15 MM @ 696/mo 10,440 Employee bonefit 3 17% 5,354 Travel 450 Material (computer time, model fabrication, tank, op amps, misc parts) 7,756 Indirect 3 24% 10,812 Fee 3 7.8% 4,357 Total \$60,217			
Employee bonefit 9 17% 5,354 Travel 450 Material (computer time, model fabrication, tank, op amps, misc parts) Indirect 9 24% 10,812 Fee 9 7.8% 4,357	Professional (senior)	12 IM @ 1754/mo	21,048
Travel 450 Material (computer time, model fabrication, tank, op amps, misc parts) Indirect 9 24% 10,812 Fee 9 7.8% 4,357	Technician	15 1M ∌ 696/mo	10,440
Material (computer time, model fabrication, tank, op amps, mise parts) Indirect 3 24% 10,812 Fee 3 7.8% 4,357	Exployee benefit	3 17,	5,354
op amps, misc parts) Indirect 9 24% 10,812 Fee 9 7.8% 4.357	Travel		450
Fee 97.85 4,357			7,756
	Indirect	3 24 ^d	10,812
Total \$60,217	Fee	3 7.8 <i>f</i>	4,357
	Total		\$60,217

The expected completion date is 1 November 1972 assuming the contract begins by 1 February, 1972.

A. R. Zandle

Budget

Professional personnel (senior)	5.5 MM	@	1660/mo	9,130
Technician	10,5 MM	@	522/mo	5,480
Employee benefit		©	17%	2,485
Material				945
Travel				338
Indirect		0	24%	4,423
Fee		ø	7.8%	1,782
Total				\$24,633

a R. I endley

DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESTGARCH

DETERMINATION AND FINDINGS Authority to Negotiate an Individual Contract

D&F No:

Upon the basis of the following findings and determination, the proposed contract described below may be negotiated without formal advertising pursuant to the authority of 10 U.S. C. 2304(a)(11).

FINDINGS

The Office of Naval Research proposes to procure by negotiation, experimental, developmental or research work calling for research on behavioral biophysics. The proposed procurement will be in the form of a modification to Contract NOOO14-69-C-0181.

The proposed contract will not call for quantity production within the meaning of paragraph 3-211.3 of the Armed Services Procurement Regulation.

- 2. Procurement by negotiation of the above described services and property is necessary because it is impossible to describe in precise detail or by definite drawings and specifications the nature of the work to be done under the proposed contract; only the ultimate objectives and the scope of the work can be outlined.
- 3. Use of formal advertising for procurement of the above described services and property is impracticable because it is impossible to describe in precise detail or by any definite drawings and specifications, the nature of the work to be done; only the ultimate objectives and general scope of the work can be outlined.

DETERMINATION

The proposed contract is for 4-101(a)(1).

research

as defined in ASPR

Contracting

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO: POOO05

STATEMENT OF JUSTIFICATION FOR 10 U.S.C. 2304(a)(11) NEGOTIATION

This contract will be negotiated with Randomline, Inc., a commercial organization, because it will provide for the continuation of a satisfactory research program based on the acceptance of an unsolicited proposal.

CONTRACTING OFFICER

CERTIFIED AS TO FACTS AND REPRESENTATIONS:

SCIENTIFITE OFFICER

CONTRACT NUMBER:
MODIFICATION NUMBER:

N00014-69-C-0181 P00004

STATEMENT OF JUSTIFICATION FOR 10 U.S.C. 2304(a)(11) NEGOTIATION

This modification will be negotiated with Randomline, Inc., a commercial organization, because it provides for the expansion in scope of a contract under which Contractor has satisfactorily performed services in the past, and which the Scientific Officer considers worthy of additional financial support.

CONTRACEING OFFICER

CERTIFIED AS TO FACTS AND REPRESENTATIONS:

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CLEARANCE MEMORANDUM

NR 144-246/10-2-70

UNCLASSIFIED

Contract Number:

NOOO14-69-C-0181

Modification Number:

P00004

3 December 1970

Physiological Psychology Programs Psychological Sciences Division

Randomline, Inc. Old York and Moreland Roads Willow Grove, Pennsylvania 19090

1. Statement of Facts

This fixed-price contract has a performance period commenceing 15 February 1969 and ending 14 February 1972. The present total price is \$62,882.00. By its proposal of 14 September 1970, Contractor recommended an expansion in scope of the work being performed. Presently, the Contractor is studying the effects of exposure to radio frequency energy and ionized air on performance. The expansion in scope will involve a complete analytical review of unique sensory systems used by selected animals. The work description will be revised accordingly.

From the technical point of view, Contractor's proposal has received the approval of the Scientific Officer, who, by Procurement Request dated 2 October 1970, has made available \$30,326.00 of NavShips funds and has recommended that an appropriate modification be negotiated.

2. Analysis of the Price

An analysis of the price is as follows:

Project Director (A. H. Frey) Engineer (E. Eichert) Biologist (S. Feld) Clerical Employee Benefits	6 MM @ \$1,660/mo. 3 MM @ \$1,120/mo. 5 MM @ \$ 740/mo. 4 MM @ \$ 490/mo. @ 17%	\$ 9,960.00 3,360.00 3,700.00 1,960.00 3,227.00
Travel (for technical discussions Indirect Costs	s) @ 24%	480.00 5,445.00
Fee	@ 7.8%	 2,194.00
	TOTAL PRICE	\$ 30,326.00

Contract Number:

NOOO14-69-C-0181

Modification Number:

P00004

Clearance Memorandum

2. Analysis of the Price (Continued)

Salaries are in accordance with Contractor's currently approved salary policy. The items of employee benefits and overhead reamin constant. The fee of 7.8% is the same as Contractor has been receiving and is considered to be very modest for a fixed-price type of contract.

3. Other Pertinent Information

Since the work to be performed is an expansion in scope within the current term of the contract, no change in the completion date is involved.

No advertising costs have been included in Contractor's budget that are prohibited by the current DOD Appropriation.

4. Authority and Reasonableness

Authority for the negotiation of the proposed modification is 10 U.S.C. 2304(a)(11). D&F Number 42626, which cites 10 U.S.C. 2304(a)(11), has been prepared.

In the opinion of the undersigned, the terms and conditions of the proposed modification, as outlined above, appear to be fair, reasonable and in the interest of the Government.

JOSEPH RICHMAN

Coptract Specialist

DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH

DETERMINATION AND FINDINGS Authority to Negotiate an Individual Contract

D&F	Number	42626
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Upon the basis of the following findings and determination, the proposed contract described below may be negotiated, without formal advertising, pursuant to the authority of 10 U.S.G. 2304(a)(11).

FINDINGS

- 1. The Office of Naval Research proposes to procure by negotiation experimental, developmental or research work calling for research and evaluation of an electrical sensing system. The proposed contract will be in the form of a Modification to Contract NOOO14-69-C-0181. The proposed contract will not call for quantity production within the meaning of paragraph 3-211.3 of the Armed Services Procurement Regulation.
- 2. Procurement by negotiation of the above described services and property is necessary because it is impossible to describe in precise detail or by definite drawings and specifications the nature of the work to be done under the proposed contract; only the ultimate objectives and the scope of the work can be outlined.
- 3. Use of formal advertising for procurement of the above described services and property is impracticable because it is impossible to describe in precise detail or by any definite drawings and specifications the nature of the work to be done; only the ultimate objectives and general scope of the work can be outlined.

DETERMINATION

The proposed contract is for engineering development as defined in ASPR 4-101 (a)(6).

Date /2/2/70

Navy L. Ravib Contracting Officer CONTRACT NUMBER:

N00014-69-C-0181

MODIFICATION NUMBER: POO3

STATEMENT OF JUSTIFICATION FOR 10 U.S.C. 2304(a)(11) NEGOTIATION

This modification will be negotiated with Randomline, Inc., a commercial organization, because it provides for the continuation of a contract under which Contractor has satisfactorily performed services in the past, and which the Scientific Officer considers worthy of additional financial support.

CONTRACTING/OFFICER

CERTIFIED AS TO FACTS AND REPRESENTATIONS:

SCIENTIFIC OFFICER

CLEARANCE MEMORANDUM

NR 144-246/27 May 1970

Contract Number: NOO014-69-C-0181 UNCLASSIFIED

Modification Number: P003

Physiological Psychology Program
Psychological Sciences Division

1 4 JUL 1970

Randomline, Inc. Glenside Avenue and Limekiln Pike Glenside, Pennsylvania 19038

1. Statement of Facts

With its letter of 15 May 1970 Contractor has submitted an unsolicited proposal to continue this contract and has requested the allocation of additional funds. This is a fixed priced contract covering the period commencing 15 February 1969 and ending 14 February 1971. The total price presently is \$41,610.

The Scientific Officer, by procurement request dated 27 May 1970 received in this office on 30 June 1970 has made available \$21,272 and has recommended that an appropriate modification be negotiated.

2. Description of Work

Generally, Contractor is performing research in the field of Behavioral Biophysics. During the proposed period of extension this same general scope of work will be continued and no change in the work description is presently required.

3. Analysis of Price

An analysis of the price is as follows:

Professional personnel (senior)	5.5 MM	@ 11;90/m6	\$ 8,195
Technician	10 MM	@ 436/mo	4,360
Employee benefit		@ 17%	2,134
Material (small equipment items)			705
Travel (Includes NATO meeting in Munich)			520
Indirect		@ 214%	3,819
Fee		@ 7.8%	1,539
Total			\$21,272

The budget indicates a modest increase in salaries which, it is expected will be in accordance with Contractor's approved salary policy. The items of Material and Travel are modest in amount, are based on past experience and are considered necessary and reasonable by the Scientific Officer. The budget sets

NR 144-246/27 May 1970

Contract Number: NOO014-69-C-0181

Modification Number: P003

3. Analysis of Price (Continued))

forth a modest increase in Indirect cost and this can be reasonably anticipated in an era of generally rising burden rates. The Fee of 7.8% is considered to be modest for a fixed priced type of contract.

4. Period of Performance

It is proposed to extend the completion date of this contract to 14 February 1972.

5. Other Pertinent Information

No advising costs have been included in the Contractor's budget. They are prohibited by the current D. O. D. appropriation.

The general provisions will be up dated.

6. Authority and Reasonableness

Authority for the negotiation of the proposed modification is 10 U. S. C. 2304 (a)(11). D & F Number 41659, which cites 10 U. S. C. 2304 (a)(11), has been prepared.

In the opinion of the undersigned, the terms and conditions of the proposed modification, as outlined above, appear to be fair, reasonable and in the interest of the Government.

JOSEPH RICHMAN

Contract Specialist

DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH

DETERMINATION AND FINDINGS Authority to Negotiate an Individual Contract

D&F Number 41659

Upon the basis of the following findings and determination, the proposed contract described below may be negotiated, without formal advertising, pursuant to the authority of 10 U.S.C. 2304(a)(11).

FINDINGS

- 1. The Office of Naval Research proposes to procure by negotiation experimental, developmental or research work calling for research aimed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior. The proposed contract will be in the form of a Modification to Contract NOO014-69-C-0181. The proposed contract will not call for quantity production within the meaning of paragraph 3-211.3 of the Armed Services Procurement Regulation.
- 2. Procurement by negotiation of the above described services and property is necessary because it is impossible to describe in precise detail or by definite drawings and specifications the nature of the work to be done under the proposed contract; only the ultimate objectives and the scope of the work can be outlined.
- 3. Use of formal advertising for procurement of the above described services and property is impracticable because it is impossible to describe in precise detail or by any definite drawings and specifications the nature of the work to be done; only the ultimate objectives and general scope of the work can be outlined.

DETERMINATION

The proposed contract is for research as defined in ASPR 4-101(a)(1).

Harry d. Ravik
Contracting Officer

CLEARANCE MEMORANDUM

NR 144-246/12-22-69
Physiological Psychology Program
Contract No: NOOO14-69-C-0181
Modification No. POO2

Unclassified

28 January 1970

Randomline, Inc. York & Moreland Roads Willow Grove, Pennsylvania 19090

1. Information Concerning this Modification

In its letter dated 3 December 1969 to the Physiological Psychology Program, Contractor requested the loan of three special systems which were acquired and used under Contract NOOO14-66-C0341 with HRB Singer. This contract expired on 31 March 1969 and will not be renewed.

The systems were used by Singer in the adjacent township to Willow Grove therefore, Randomline can take accountability for the systems without incurring shipping costs.

Contractor advises that the use of the systems will allow them to expand the scope of the work they are now conducting with no additional cost to the Government.

Contractor is now performing work under this contract in the experimentation with crustaceans cardiac response to rf energy to which they are now contractually committed. They will expand the scope of the work to do additional study on electrical gradient manipulation and effect of the olfactory mucosa response if these unique systems are provided. They will also evaluate the gradient effect on the EOG and higher neural interactions.

The additional work has considerable significance to the Navy and direct application to certain problems in submarine as well as other applications and it is expected that the data that would result would have a bearing on long term habitability aboard ships and lead to means to increase personnel effectiveness.

- 2. Accordingly, the Scientific Officer in Code 454 approved Contractor's request and forwarded a PR dated 22 December 1969 requesting this office to make the systems available to the contractor.
- 3. The undersigned discussed this matter with the ONR Property Branch and was advised by them that a modification should be processed to list the items of Government-Furnished Property as set forth in the inventory forwarded by the Contractor and when the modification has been executed accountability of the items will be transferred to Randomline Contract NOOO14-69-C-O181.

L. A. Duncker

CONTRACT NUMBER: MODIFICATION NUMBER:

N00014-69-C-0181

STATEMENT OF JUSTIFICATION FOR 10 U.S.C. 2304(a)(11) NEGOTIATION

This modification will be negotiated with Randomline, Inc., a commercial organization, because it provides for the continuation of a contract under which Contractor has satisfactorily performed in the past, and which the Scientific Officer considers worthy of additional financial support.

C.w. 2 Larkey

CERTIFIED AS TO FACTS AND REPRESENTATIONS:

SCIENTIFIC OFFICER

DETERMINATION AND FINDINGS

Authority to Negotiate Individual Contract for Experimental, Developmental or Research Work

		•
D&F	Number	39557

On the basis of the following findings and determination, the proposed contract modification described below may be negotiated, without formal advertising, pursuant to the authority of 10 U.S.C. 2304(a)(11).

FINDINGS

- 1. It is proposed that the Contractor will continue to perform research aimed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior.
- 2. Within the Navy, there are many relatively closed spaces in which personnel are exposed to varying levels of electromagnetic radiation and/or ionized air which could effect individual performance. This work unit is concerned with the effects of exposure to radio frequency energy and ionized air on neural activity and behavior.
- 3. The proposed contract modification does not call for quantity production of any article.
- 4. It is impossible to describe in precise detail or by definite drawings and specifications the nature of the work to be done under the proposed contract modification; only the ultimate objectives and the general scope of the work can be outlined.
- 5. It is impracticable to procure this requirement by formal advertising because it is for study, investigation and experimentation which cannot be sufficiently described.

DETERMINATION

The proposed contract modification is for research as defined in ASFR 4-101(a)(1).

Date 8-21-69

Contracting Officer

CLEARANCE MEMORANDUM

NR 144-246/8-6-69

UNCLASSIFIED

Contract Number:

N00014-69-C-0181

Modification Number:

P001

21 August 1969

Physiological Psychology Program Psychological Sciences Division

Randomline, Inc. Glenside Avenue and Limekiln Pike Glenside, Pennsylvania 19038

1. Statement of Facts

Contractor has submitted an unsolicited proposal to continue this contract and has requested the allocation of additional funds. The contract, which is a fixed price contract, covers the period commencing 15 February 1969 and ending 14 February 1970. The total price presently is \$20,680.00.

The Scientific Officer, by Procurement Request dated 6 August 1969, has made available \$30,930.00 and has recommended that an appropriate modification be prepared.

2. <u>Description of the Work</u>

Generally, Contractor is studying the effects of exposure to radio frequency energy and ionized air on performance. During the proposed period of extension, this same general scope of work will be continued and no change in the work description is presently required.

3. Analysis of the Price

An analysis of the price is as follows:

Professional Personnel (Senior)	6MM @ 1408/mo.	\$	8,448,00
Engineering Assistant	10MM @ 435/mo.		4,350.00
Employee benefits	@ 17%		2,176.00
Materials (Subjects and small eq	uipment .items)		915.00
Travel (for technical discussion	s with other investigator;	s)	290.00
Indirect Costs	@ 20%		3,235.00
Fixed Fee	@ 7.8%		1.516.00
	TOTAL PRICE	\$	20,930,00

Contract Number:

N00014-69-C-0181

Modification Number: POO1

Clearance Memorandum

3. Analysis of the Price (Continued)

There has been no increase in the salary of the senior professional but there has been a modest increase for the engineering assistant. The salaries are in accordance with Contractor's approved salary policy. A modest amount is made available for materials, which consists of subjects and small equipment items. Based on past experience, the amount made available is reasonable. Likewise a small amount is made available for local travel. Overhead at 20% is the same as heretofore and is acceptable to the cognizant government auditor in regard to fixed price contracts. The fee of 7.8% is considered to be modest.

4. Period of Performance

It is proposed by this modification to extend the completion date of this contract to 14 February 1971.

5. Other Pertinent Information

No advertising costs have been included in the Contractor's budget that are prohibited by the current DOD Appropriation.

6. Authority and Reasonableness

Authority for the negotiation of the proposed modification is 10 U.S.C. 2304(a) (11). D&F Number 39557, which cites 10 U.S.C. 2304(a)(11), has been prepared.

In the opinion of the undersigned, the terms and conditions of the proposed modification, as outlined above, appear to be fair, reasonable and in the interest of the Government.

JOSEPH RICHMAN

Contract Specialist

CERTIFICATION OF RESPONSIBLE CONTRACTOR

COMING A CITE ATTRICTURE
CONTRACT NUMBER: NOOO14-69-C-018I
NR #144-246/8-23-68 or Requisition #
1. The proposed contractor, Randomline, Inc.
(a) is a manufacturer or regular dealer. (yes)
(b) has adequate illiancial resources on the shilling
= + 0500C 0C0 1 1 100 1
(c) has the necessary experience, organization, and technical
The second of th
(d) is able to comply with the required delivery and a
(e) has a satisfactory record of performance, integrity, judgment, and skills. (yes)
(f) is otherwise qualified and eligible to receive an award under
applicable laws and regulations. (yes)
2. Was a pre-award survey required. (no)
A pre-award survey was required and was obtained with favorable/unfavorable (cross out one) comments. If unfavorable, give reasons for over-ruling.
·
Willean Chalbran
Jo Milliam Kelleran
Contract Specialist
In accordance with the requirements of ASPR 1-904, I hereby certify that the
proposed contractor for this procurement is responsible.
F. Total omono 15 1esponsible.
C. W. Hastley
C.W.) Laster Contracting Officer

CONTRACT NUMBER: NOOO14-69-C-0181

STATEMENT OF JUSTIFICATION FOR 10 U.S.C. 2304(a)(11) NEGOTIATION

This contract will be negotiated with Randomline, Inc., a commercial organization, because the proposal was proprietary with the Contractor, and the Scientific Officer considers the task worthy of financial support.

C.W. Larkey OONTRACTING OFFICER

CERTIFIED AS TO FACTS AND REPRESENTATIONS:

SCIENTIFIC OFFICER

DETERMINATION AND FINDINGS

Authority to Negotiate Individual Contract for Experimental, Developmental or Research Work

D&F Number 37658

On the basis of the following findings and determination, the proposed contract described below may be negotiated without formal advertising, pursuant to the authority of 10 U.S.C. 2304(a)(11).

FINDINGS

- 1. It is proposed that the Contractor will perform research aimed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior.
- 2. Within the Navy, there are many relatively closed spaces in which personnel are exposed to varying levels of electromagnetic radiation and/or ionized air which could effect individual performance. This work unit is concerned with the effects of exposure to radio frequency energy and ionized air on neural activity and behavior.
- 3. The proposed contract does not call for quantity production of any article.
- 4. It is impossible to describe in precise detail or by definite drawings and specifications the nature of the work to be done under the proposed contract; only the ultimate objectives and the general scope of the work can be outlined.
- 5. It is impracticable to procure this requirement by formal advertising because it is for study, investigation and experimentation which cannot be sufficiently described.

DETERMINATION

The proposed contract is for research as defined in ASPR 4-101(a)(1).

Date	C.w.) farkey Contracting Officer	
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SUPPLEMENTARY CLEARANCE MEMORANDUM

Subsequent to the preparation of the Clearance Memorandum dated 21 January 1969, it was determined to establish a fixed price contract for this research program. Mr. Zandle of Randomline, Inc. agreed to accept a fixed price contract.

WILLIAM C. SULLIVAN Contract Specialist Aulleren

CLEARANCE MEMORANDUM

NR 144-246/8-23-68

Contract Number: N00014-69-C-0181

UNCLASSIFIED 21 January 1969

Physiological Psychology Branch Psychological Sciences Division

Randomline, Inc. Glenside Avenue & Limeliln Pike Glenside, Pennsylvania 19038

1. Statement of Facts

By letter dated 8 August 1968, Randomline, Inc. submitted a proposal to conduct research on electrical environment and neural functions. Included in the Contractor's proposal is a budget setting forth a figure of \$20,680.00 for the research program.

The cognizant Scientific Officer reviewed and approved the Contractor's proposal, and by Procurement Request 144-246, dated 23 August 1968, made available the requested funds.

2. Selection of Contractor and Contract Type

The Scientific Officer stated that the Contractor was selected on the basis of an unsolicited proposal. "The principal investigator, A. H. Frey, is a recognized expert in the fields of the effects of air ionization and electromagnetic radiation on the human nervous system and behavior."

Randomline, Inc. was incorporated early in 1968. This will be the Contractor's first DOD contract. The Contractor presently employs five professional researchers. Facilities measure about 1600 square feet. The principle stock holder is Mr. Zandle and the majority of the stock is held by employees. While the Contractor has not been audited by the Department of Defense, experience in rendering services to other commercial organizations has satisfied them that the overhead of 20% is reasonable.

The contract type will be cost plus fixed fee. This program is essentially a continuing research effort. The principal investigator has been conducting research in this field since 1960.

3. Description of Work

Generally, the Contractor will conduct research on the effects of exposure to radio frequency, energy, and ionized air on performance.

Contract Number: NOO014-69-C-0181

Analysis of Cost

Professional personnel (senior) 6MM @ 1408/mo Engineering assistant 10MM @ 426/mo Employee benefit @ 14% Materials (subjects and small equipment items) Travel (for technical discussions with other investigators) Indirect @ 20%	\$ 8,448.00 4,260.00 1,778.00 1,120.00 380.00 3,198.00
ESTIMATED COST	\$19,184.00
FIXED FEE (7.8%)	1,496.00
TOTAL	\$20,680.00

Nearly the entire budget is allocated to direct labor and overhead. Wages are payable in accordance with the Contractor's policy. Funds requested for materials will be used in the procurement of animals for experimentation, paper, etc. The Contractor's estimate for overhead is based upon his experience and would appear acceptable for this relatively small contract. The DOD auditor should be contacted prior to modification of this contract for verification of actual overhead experience. The Contractor has requested a fee of 7.8% which appears reasonable.

5. Period of Performance

The Contractor requested that the period of performance commence on 15 February 1969. Completion will, therefore, be 14 February 1970.

6. Other Pertinent Information

The Patent Rights (Deferred) clause will be applicable to this contract.

This contract will include the latest General Provisions.

7. Authority and Reasonableness

Authority for the negotiation of the proposed contract is 10 U.S.C. 2304(a)(11). D&F Number 37658, which cites 10 U.S.C. 2304(a)(11), has been prepared.

In the opinion of the undersigned, the terms and conditions of the proposed contract, as outlined above, appear to be fair, reasonable and in the interest of the Government.

WILLIAM C. SULLIVAN

Contract Specialist

PATENT COUNSEL (Signature)

Benfluire

CONTRACTING OFFICER'S DETERMINATION

ferred or dominant commercial position if he were permitted to acquire title to inventions

ASPR 9-107.5(a) - Title

CONTRACTING OFFICER (Signature)

under the contract?

Patent Rights clause as indicated below shall be included in this contract: 1 ASPR 9-107.5(c) - Deferred ASPR 9-107.5(b) - License ACTIVITY 1-27-69 ONR C.w.) Lastley

ACTIVITY

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24 Jan 1969

ONR WORKSHEET FOR INDIVIOUAL PROCUREMENT ACTION REPORT (DD-350) NAVSO 4200/6 (REV. 11-68)

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MILITARY FUNCTION/OPERATION

NAVSO 3900/7 (REV. 5-71)

ATEMENT OFFICE OF NAVAL RESEARCH

NR NUMBER	DATE OF PR	CONTRACT NUMBER	
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309-005	14 Jul 71	N00014-69-c-0180	;
			PROPOSED FUNDING
Randomline, Inc.			
			24,633

RELATIONSHIP TO A MILITARY FUNCTION OR OPERATION

1. The work to be accomplished under this procurement relates to the following military function or operation: the effect of radio frequency energy on body functioning and performance of Naval/Marine Corps personnel

DONALD P. WOODWARD

SCIENTIFIC OFFICER

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OFFICE OF NAVAL RESEARCH ADDRESS:* DEPARTMENT OF THE NAVY ARLINGTON, VIRGINIA 22217 ARLINGTON, VIRGINIA 22217 PRINCIPAL INVESTIGATOR (FURISH STAN II U.S., Acedemic Institution)	
TELEPHONE: AREA Code -202-692-1055	
II. GENERAL USE ASSOCIATE INVESTIGATORS	
NAME:	
NAME: 2. KEYWORDS (Precede EACH with Security Classification Code)	

- (U) PERSONNEL TECHNOTOGY: (U) Air ions; (U) Bio-electric
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- 23. (U) The detection, identification and classification of objects underwater is a continuing Navy problem. During this acceleration, work will continue on development and testing of a small scale model of weskly electric fish as one possible solution to this problem.
- 24. (U) This effort will be concerned with further definition, development, and testing of a fixed small scale model of weakly electric fish, to determine the effectiveness of such a model in detection and classification of objects underwater. The work will be iterative in nature, alternating emong data gathering with the small scale model, modification of a mathematical model, and further testing and data gathering on the fish itself.
- 25. (U) Progress on the work under the basic contract has been previously reported (14 July 71). Work completed related to this effort consisted of a review of the literature, preliminary data gathering, and mathematical analysis of the object detecting behavior of weakly electric fish. Results strongly; suggest that a model for detection and classification of objects in brackish and fresh water could be built using principles employed by weakly electric fish, and that the classification capability may be better than currently used devices.
- Frey, A. "Biological Function as Influenced by IQu-Power Modulated RF Energy", Trans. on Microwave Theory and Techniques, Feb. 1971.

MIL..ARY FUNCTION/OPERATION STATEMENT OFFICE OF NAVAL RESEARCH NAVOO 3900 /7 (Rev. 5-/1)

NR NUIABER	DATE OF PR	CONTRACT NUMBER	MODIFICATION NUMBER
NR- 309-005	22 Nov 71	N00014-69-C-0180	
CONTRACTOR (NAME ONLY)			PROPOSED FUNDING
Randomline, Inc.			\$ \$60,217

RELATIONSHIP TO A MILITARY FUNCTION OR OPERATION

1. The work to be accomplished under this procurement relates to the following military function or operation: relates to the detection and classification of objects underwater.

Wandelf Woodward

SCIENTIFIC OFFICER

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17. ACR APPROVALS (Typed names and signatures)
PROGRAM DIRECTOR
DIVISION DIRECTOR

LEGELED N. LIBRES

R. H. WETWEERG

ASSISTANT CHIEF FOR RESEARCH

... ... WEINBERG

R. V. HAYES, CAPT, USW



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*Available to contractors upon originator's approval.

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ONR PROCUREMENT REQUEST AND APP NAVSO 3900/3 (REV. 1-71)	n L	1. SUBMISSION DATE 22 Nov 1971	DD-254 DATE	7	RITY REQUIREMENTS	IONE [
3. TASK TITLE (UNCLASSIFIED EAM TITLE	REQUIRED)			9. A	ECOMMENDATION	
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	Willey Grove, Pennsylvania 19010				EQUIPMENT LOAN OVER-RUN	_
5. PRINCIPAL INVESTIGATOR					NO-FUNDS EXTENSION REDUCTION REOPENED	
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7. CONTRACT DESCRIPTION OF WORK	7A.	UNCLASSIFIED OCEANO	GRAPHIC ENVIRON	MENT	AL DATA INVOLVED	

To continue definition, development, optimization, and test of a fixed small scale model of waskly electric fish to assess its possible utility in detecting various metal and non metal objects in water.

Note to 600: If possible this ecceleration should be regotiated at the same time as the rememal PR substitted 14 July 71 for same effective dates.

I certify the DD-254 has been reviewed for currency. MW

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DIRECT	TOR OF RESEARCH		Signed		ASSIST	ANT CHI	EF FO	RESEAR	СН	<u> </u>	·

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- 23. (U) The detection, identification and classification of objects underester is a continuing Havy problem. During this acceleration, work will continue on development and testing of a small scale model of weekly electric fish as one possible solution to this problem.
- 24. (U) This effort will be concerned with further definition, development, and testing of a fixed small scale model of weakly electric fish, to determine the effectiveness of such a model in detection and classification of objects underseter. The work will be iterative in nature, alteresting emong data gathering with the small scale model, modification of a mathematical model, and further testing and data gathering on the fish itself.
- 25. (U) Progress on the work under the basic contract has been praviously reported (1/ July 71). Sork completed related to this effort consisted of a review of the literature, preliminary data gethering, and mathematical analysis of the object detecting behavior of weekly electric fish. Besults strongly suggest that a model for detection and classification of objects in brockish and fresh water could be built using principles employed by weakly electric fish, and that the classification capability may be better than currently used devices.
- Froy, A. "Miclogical Function as Influenced by Low-Power Modulated RF Desigy", Trans. on Microwave Theory and Techniques, Feb. 1971.

RANDOMLINE, INC. OLD YORK & MORELAND ROADS WILLOW GROVE, PENNA, 19090 (215) OL 9.6228

Definition of the Electrosensing System

November, 1971

In an earlier study, in which we carried out an analysis of the literature and mathematical analyses, we found evidence that a model for detection and classification of objects in water could be built using the principles employed by weakly electric fish. The analyses indicate that the model's classification capability is likely to be as good or that the model's classification capability is likely to be as good or better than the devices that are currently used in the open ocean. Further, the device would also be effective in brackish and frash water such as in barbors and rivers.

Tropogal: We propose here that an effort be undertaken to respectively, optimize, and test a fixed small scale model of the weakly electric fish. In this way, data can be gathered which can be combined with our mathematical model to extend the mathematical model and yield the information necessary for the development of a full scale experimental model.

Method: We would gather data on a fixed small scale model in a tank. The initial model design will involve a plastic cylinder with sensors and field generator installed as indicated by our mathematical model. It would be fixed centrally in a tank of suitable size i.e. as determined by our mathematical analysis which yielded the specification of the tank required for the collection of valid data.

Chee the model is constructed, objects of interest would be moved about within the valid data collection region and measurements made to study the response characteristics of the receptor system. These objects will include various plastics, motals, living tissue, multi-component objects with multiple interfaces, etc. The work would be carried out using fresh and brackish water. Particular attention will be devoted to factors such as water current flow.

The procedure would be to modify the sensors, sensor organization, the signal processing procedures, etc. in order to optimize classification capability and range capability. As data is gathered, an iterative process will be used. In this, we will alternate between data collection and mathematical model modification in order to achieve the optimal

It is expected that in the course of this effort, behavioral tests sensor system design. will be carried out with weakly electric fish in order to obtain guidence at difficult decision points involving design parameters.

Expected Results: The product of the proposed effort shall be

- 1) a design for a sensor system for use in a full scale experimental model. The desire is to obtain the optimal sensor system design that can be used in a full scale experimental model to gather definitive information on objects of interest in a real
 - 2) A definition of the complexity of the signal processing apparatus that will be required in a full scale experimental model.

RANDOMLINE, INC. OLD YORK & MORELAND ROADS OLD YORK & MORELAND ROADS WILLOW GROVE, PENNA. 18090 WILLOW GROVE, PENNA. 18090

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. "ior)	15 15 696/mo	5,354
Professional (senior)	19 17 g 17 g	450
machnician .		7,756
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op amps, misc parts) Material (computer 3 7.8.4

\$60,217 Indirect

Fee Total

The expected completion date is 1 November 1972 assuming the contract begins by 1 February, 1972.

144246 Cossed

RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

Request for rememal of contract NOO014-69-C-0181
Behavioral Biophysics

May, 1971

27 MAY 1971

Project Director

Secretary - Treasurer

In previous years, our experimentation has been primarily concerned with the behavioral and physiological effect of radar wavelength rf energy; the effect of variation in electrical conductivity of the air on emotion and stress, variations such as that induced in closed environments by electronic equipment; and in the effect of variations in normally occurring electrostatic fields on elfactory sensor function.

This past year our emphasis has been on extending our work with the effect of rf energy on the heart, carrying out an analytical review is which we developed the theoretical bases for the effect of low power rf energy, extending the theoretical work on olfactory sensor mechanisms, and carrying out a special analytical review of the nature of a recently found sensory system in the fish as it bears on the mine countermeasures problem.

The results of the heart experimentation were reported at the recent NATO advisory panel meeting. Additional heart results were presented at two other Symposiums.

Α,

An evaluation of the controls needed and pitfalls in interpretation of rf data was requested and was presented at the recent Armed Services

Epidemiological Board meeting.

Additional theoretical work on controls and the interpretation of experiments will be presented this month at a Symposium at the Navy Post Graduate School at Monterey.

On the basis of these data and the development of a general view of neural function in which the CNS is regarded as a solid-state system, certain lines of experimentation are indicated for this coming year,

One line shall be an extension of our work with olfactory sensitivity and the influence of various conductivity parameters on the perception of edor. The background for this experimentation is provided in the attached reprint entitled "Electrical charge distribution and olfactory methodology

and theory". We intend to initially work with an odor panel as the sensor and manipulate the charge characteristics within an odor exposure room which we are presently designing to obtain precise measurements and to control and manipulate charge and field characteristics.

A second line of investigation will be concerned with the notivational properties of rf emergy, Although we have shown behavioral cusing properties of rf energy there remains the question whether the energy at low levels has motivational properties. The background that leads to this question can be found in the attached reprist entitled "Biological function as influenced by low power modulated rf energy". We intend to carry out a behavioral study with white rate is which we shall evaluate this possibility. We have worked out what appears to be an easily interpretable straight forward test of the motivational properties of rf energy. Taking into consideration the special controls and apparatus needed in this type of experimentation, we are working out a modification of the standard type shuttle box. We plan to, in essence, have one side of the shuttle box shielded from the energy and the other side exposed to the energy. We shall then mountar the amount of time spent by the animal in each side of the shuttle bex. In this way, using a factorial design, we anticipate being able to determine whether the low power if energy has rewarding motivational properties, aversive motivational properties, or is neutral in terms of motivational properties.

We have also started work, as a third line, to develop a ballistecardiogram technique for detecting heart activity in the rf field. In this way, we can avoid applying wires to the subject. Because of the characteristics of the field, we cannot use conventional ballistocardiogram squipment for sonitoring heart activity. We have found it necessary to develop

equipment for monitoring heart activity in the field. The ballistocardiogram design work is moving along satisfactorily and if it is successfully completed we shall carry out a study of heart activity this year.

We have also begun work this year to extend our earlier studies on the rf hearing phenomenon. An rf laboratory energy source that meets the requirements for such studies has finally become available connercially. We have obtained one of these sources and are working out techniques to tie it to our computer so that we can manipulate ever a wide range the rf parameters. This coming year we plan to experimentally establish and extend the work described in the attached reprint estitled "Ruman auditory system response to modulated electromagnetic energy" and experimentally establish various threshold measures, relate various energy parameters to the perceived sounds, and begin working towards identification of the mechanisms involved in the perception of these "sounds".

Budget

Professional personnel (semior)	5.5 MM	@ 1660/mo	9,130
Technician	10,5 MM	Ø 522/mo	5.480
Employee benefit		9 17%	2,485
Material			945
Travel			338
Indirect		e 24%	4,423
Pee	•	6 7.8%	1,782
Total			\$24,693

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ONR WORKSHEET FOR INDIVIDUAL PROCUREMENT ACTION REPORT (DD-350) NAVSO 4200/6 (REV. 11-68)

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ONR PROCUREMENT REQUEST AND . ROYAL NAVSO 3900/3 (REV. 11-68) 2. CURRENT SECURITY REQUIRED 19 2 et 1970 3. TASK TITLE (UNCLASSIFIED EAM TITLE REQUIRED) 9. RECOMMENDATION Behavioral Riophysics INSTRUMENT TYPE OF ACTION EAM: NEW CONTRACT X 4. CONTRACTOR (NAME AND LOCATION OF WORK PERFORMANCE) RENEWAL Randomline, Inc. ACCELERATION GRANT Old York & Moreland Rodds EXPANSION Willow Grove, Pennsylvania 19010 EQUIPMENT LOAN OTHER NO-FUNDS EXTENSION 5. PRINCIPAL INVESTIGATOR REDUCTION A. H. Frey REOPENED 6. BASIS FOR CONTRACTOR SELECTION EXPENDITURE RATE (New procurement only) 10. PERIOD TO BE COVERED BY THIS PROCUREMENT ACTION (enter dates) b. AMOUNT 8. FY UNSOLICITED PROPOSAL 15 Nov 70 14 Feb 72 SOLE SOURCE SOLICITATION 7. CONTRACT DESCRIPTION OF WORK It is desired that work covered by this modification be started no later than 15 Nov 70 and be completed by 30 Aug 71. This acceleration and expansion is to switchen and complete an analytical review of unique sensory systems which selected animals use in obtaining information about objects in their environment. The review is designed to provide information such as: what is the nature of the mechanism; does the system have potential useful application in development of a technique for classifying an object (man, mine, etc.) in the water or on the bottom; can the system be modeled; do we have all the necessary data for modeling, if not identify data requirements; what are possible limitations; what improvements might make the system more useful U 000 F in classifying objects in water. 12. CONTRACT NUMBER DONALD P. WOODWARD 144-246 (formerly NR 00014-69-C-0180 IS. FOR USE OF COMPTROLLER'S OFFICE 14. SOURCE OF FUNDS a, cope b. SUB-PROJECT (TASK AREA) OBJ. BUREAU AUTH. TRANS d. AMOUNT APPROPRIATION COST CODE ACCT.NO. TYPE ASENC lıslı 17X1310.14 501 nr 144-246 (42) REO # 035h2-NAVSHTPS 71 \$30,326 03542-1-0129 '70 PM Low Water W LAMOUNT APPROVED 16. COMMITMENT (initials and date) e. TRANSFER OF FUNDS FROM (Code) 326 TRANSMITTAL NO. DR APPROVALS (Typed names and signatures) DIA SEKAICES CROUP enn L. Iryan RECTOR OF RESEARCH ACCINE 1 6 00T 1970 1 6 OCT 1970

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22. KEYWORDS (Precede EACH with Security Classification Code)

(U) PERSONNEL TRUNCTORY: (U) AIT LONG:

(U) electromagnetic energy: (U) Nervous system; (U) electrophysiological; (U) Hio-electric
23. TECHNICAL OBJECTIVE,* 24. APPROACH, 25. PROGRESS (Furnish Individual paragraphs identified by number. Procede text of each with Security Classification Code.)

- 23. (U) The detection, identification, and classification of objects underwater is a continuing Navy problem. During this acceleration, this work unit will review the possible utility of bic electric sensors used by certain organisms as a possible solution of this problem.
- 24. (U) Work during this acceleration period will be concerned with an analytical review of unique sensory systems used by certain animals in detecting and identifying certain objects in their environment. The intent of the review is to provide information on the nature of the sensory mechanism, its possible application to underwater object detection problems, the possibility of modeling the system, identifying limitations and possible improvements.
- 25. (U) Progress on the work going on under the basic contract has been previously reported (27 May 1970). Briefly, recent experimentation demonstrated the effect of passing air through low frequency grids on apparent odor concentration. Test subjects report a doubling of odor level 20-30 min. after the low frequency energy is turned off. Other work showed an effect of radar wavelength energy depending on the phase of the heart cycle.

Frey, A. "Effects of Microwaves and Radio Frequency Energy on the Central Nervous System", TR 1-70, Sep 1969

*Available to contractors upon originator's approval

MILITARY RELEVANCE STATEMENT

NAVSO 3900/7 (Rev. 4-70)

OFFICE OF NAVAL RESEARCH

NR NUMBER	DATE OF PR	CONTRACT NUMBER	MODIFICATION NUMBER
NR-144-246	2 Oct 70	N00014-69-C-0180	
CONTRACTOR (NAME ONLY)			PROPOSED FUNDING
Randomline, Inc.			s

STATEMENT ON

DIRECT AND APPARENT RELATIONSHIP TO A SPECIFIC MILITARY FUNCTION OR OPERATION

PURSUANT TO PL 91-121, FY 70 AUTHORIZATION ACT

1. The work to be accomplished under this contract/grant relates to the detection identification and classification of underwater objects.

2. This contract/grant is certified to meet the requirements of Section 203 as indicated in paragraph 1. above.

LBERT C. TOLHURST

SCIENTIFIC OFFICER

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b. AMOUNT

S. FY

SOLICITATION 7. CONTRACT DESCRIPTION OF WORK

SOLE SOURCE

UNSOLICITED PROPOSAL

It is desired that work covered by this modification be sterted no later than 15 Nov 70 and be completed by 30 Aug 71. This secolaration and expansion is to intitute and complete an analytical review of unique sensory systems which selected animals use in obtaining information about objects in their environment. The review is designed to provide information such ear what is the nature of the machanism; does the system here potential useful application in development of a technique for classifying an object (man, mine, etc.) in the water or on the bottom; can the system be modeled; do we have all the necessary data for modeling, if not identify data requirements; what are possible limitations; what improvements might make the system more useful

15 Nov 70

FROM

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- 2). (U) The detection, identification, and classification of objects underwater is a continuing Easy problem. During this acceleration, this work unit will review the possible utility of his electric sensors used by certain organisms as a possible solution of this problem.
- cl. (0) Work during this acceleration period will be concerned with an analytical review of unique sensory systems used by cortain animals in detecting and identifying cortain objects in their environment. The intent of the review is to provide information on the nature of the sensory machanism, its possible application to underwater object detection problems, the possibility of modeling the system, identifying limitations and possible improvements.
- 25. (0) Progress on the work going on under the heate contract has been previously reported (27 May 1970). Briefly, recent experimentation descriptated the effect of passing air through los frequency grids on apparent odor concentration. Dest subjects report a doubling of odor level 20-30 min. after the low frequency energy is turned off. Other work showed an effect of radar wavelength energy depending on the phase of the heart cycle.

Frey, &. "Effects of Microsseves and Hadio Frequency Energy on the Central Nervous System", TR 1-70, Sep 1969

*Available to contractors upon originator's approval.

### RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

September 9, 1970

Dr. Donald Woodward (454) Physiological Psychology Program Office of Naval Research 800 N. Quincy St. Arlington, Va. 22217

Dear Don:

Enclosed is the official proposal on the Electrical Sensing System that I have discussed with Mr. Welsh (Nav Ships 03542) and that he has discussed with Gib. I've also sent a copy to Mr. Welsh. As I understand it, it is now ready to go through your system.

Mr. Welsh and I plan to meet for discussions every few months. The contracts people, however, probably would prefer seeing a contract written with quarterly letter reports which is okay with me.

I'm leaving the country tomorrow and will return October 11. I'll contact you when I return in case any questions come up.

Regards.

Allan H. Frey

Allan

AHF/bw

enclosures:

# RANDOMLINE, INC.

Old York & Moreland Roads Willow Group Penna, 19090

(215) (0) 9-6228

A Proposed Evaluation of an Application of an Electrical Sembles Symbol

In recent years, a previously unknown sensory system has been allegatified and is receiving increasing interest among sensory psychologises. It was is a class of vertebrate whose behavior is in large part guided by an electrical field generating and perturbation sensing system. On the basis of a proliminary review, we suggest that the principle of the sensory system may have application to a serious problem for the Navy - the detection of swimmers and adver. We suggest that an in depth analytical review of the data be undertaken including technical discussions with various investigators as necessary on a fellow scientist basis. Our approach is described below.

<u>Problem:</u> Is there a technique that can be used to classify an oblique in the water or on the bottom i.e. is it a man, flotsam, mine (metal or plastic) or a rock?

Ideal solution: The development of a technique and eventually equipment to do such classification at a reasonable cost in terms of size, weight, power requirements, etc.

Method: Carry out an enalytical review in an attempt to determine him cartain vertebrates with a unique sendon; system use the system is character food and in available danger. Carried workships, such as gymnoticle and electrical field and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a control of the carried and a contro

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Do we have evailable all the necessary data needed to model at:

If not, what data is needed?

What are the probable limitations on its use?

Can we improve on the system for our particular application?

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Fragova, h. ., Kragukhin, S.V. The internal line of fish as a device for the of the clearacal field. Figures, ed. H. Gaaza-Rapoport & V. Yakobi. (114), Jul. 125. 1965.

Clark, Warron L. and Granath, Louis. A moasure of the threshold sension was a granatus corner to electric fields. in his.

Inger, Per S. and Szabo, Thomas. Activity of Contral neurons involved in cleatroreception in some weakly elsewrip fich (Gymnetidae). J. Neurophy. Lelay. V. 28, No. 5 September 1965.

Granath, Louis P., Sachs, Monard G. and Erckine, Fred T. III. Electrical Sensitivity of a weakly electric fich. Life Sciences Vol. 6, pp. 2373-2377. 1867 Hogiwara, S. and Morita H. Coding acclanises of electroreceptor fibers in John Claritic fish. J. Neurophysiology, 1969, 26, pp. 551-567.

Lisemann, H. W. Electric location by fishes. Scientific American. Place 1969, pp. 50-59.

Liesmann, H. W. and Machin, N. Electric Resoptors in a Non-electric fiel (Clause). Vature. V. 199, 88-89, July 6, 1963.

Machin, K. E. Electric Receptors. Symposium of the Society for Experimental Biology. pp. 227-243.

Minkoff, Lawrence A., Clark, Warren L, and Sachs, Howard G. Interopiles incorval analysis of the discharge of a weakly cleatric Mormyrid fish. in MS.

Nurran, R. W. Electroreceptor mechanicas: the relation of impulse frequency to stimulus strength and responses to pulsed stimuli in the ampullae of loss suitable of elasmobranchs. J. Physiol, 130. pp. 592-606.

Suga, Nubuo. Electrosensitivity of Causi and free neuromast organs in a grant is electric fish. J. Comp. Neur. 131: 453-458. Dec. 1967.

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- (U) PERSONNEL TECHNOLOGY: (U) Air lons; (U) electromagnetic energy; (U) Nervous system;
  23. TECHNICAL OBJECTIVE,* 24. APPROACH, 25. PROGRESS (Furnish Individual paragraphs identified by number, procede lext of activities security Classification Code,)
- 23. (U) Within the Newy, there are many relatively closed spaces in which personnel are exposed to varying levels of electromagnetic radiation and/or ionized air which could effect individual performance. This work unit is concerned with the effects of exposure to radio frequency energy and ionized air on neural activity and behavior.
- 24. (U) Work planned for the coming year includes (1) experiments on the mechanisms of the neural effect of radar wavelength energy, (2) additional experiments on the effects of exposure to radio frequency energy on heart function, and (3) further work on the relationship between air ionization and olfaction.
- 25. (U) In one experiment just completed it was found that by passing air through low frequency grids, thereby modifying the electrical charge in the air, drastically reduced the apparent odor concentration. Test subjects report a doubling of odor level within 20-30 minutes after the low frequency energy is turned off. In further experimentation with radar wavelength energy using intact animals, a decrease in heart rate occurred when radar pulses implinged on the subject at the occurrence of the electrocardiogram R wave. Esdar pulses implinging at the T wave had no effect.

  1.2 Ohs pulsed modulated energy at average power densities of less than 1 was used. This average power density is less than might be expected in some operational dituations:

rey, A., "Effects of Microwaves and Radio Frequency Energy on the Central Nervous bystem," TR 1-70, Sep 1969

	OF WAVAL HESEARCH	
NR- 144-246	27 May 1970 NOO014-69-C-0181	MODIFICATION NUMBER
Randomline, Inc.		PROPOSED FUNDING
		\$ 21,272

STATEMENT ON DIRECT AND APPARENT RELATIONSHIP TO A SPECIFIC MILITARY FUNCTION OR OPERATION PURSUANT TO PL 91-121, IY 1970 AUTHORIZATION ACT

1. The work to be accomplished under this contract/grant relates to the effect of radio frequency energy on body functioning and performance of Naval/Marine Corps personnel.

My Contraction

DONALD P. WOODWARD

SCIENTIFIC OFFICER

This contract/grant is certified to meet the requirements of Section 203 as indicated in paragraph 1. above.

# ONR PROCUREMENT REQUEST AND APPROVAL NAVSO 3900/3 (REV. 11-68)

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To perform research aimed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior.

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	ngton, D. C.				Will	OW (	k & More Grove, F	a. 190	90	
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I. GENERAL USE					E (NVESTEGA		NUMBER:			;
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. KEYWORDS (Precede EA	CH with Security Classifics	tion Code)	<del></del>	NAME:						

- (U) PERSONNEL TECHNOLOGY: (U) Air ions; (U) electromagnetic energy; (U) Nervous system;
  23. TECHNICAL OBJECTIVE,* 24. APPROACH, 28. PROGRESS (Furnish individual paragraphs identified by number. Precede text of Each with Security Classification Code.)
- 23. (U) Within the Navy, there are many relatively closed spaces in which personnel are exposed to varying levels of electromagnetic radiation and/or ionized air which could effect individual performance. This work unit is concerned with the effects of exposure to radio frequency energy and ionized air on neural activity and behavior.
- 24. (U) Work planned for the coming year includes (1) experiments on the mechanisms of the neural effect of radar wavelength energy, (2) additional experiments on the effects of exposure to radio frequency energy on heart function, and (3) further work on the relationship between air ionization and olfaction.
- 25. (U) In one experiment just completed it was found that by passing air through low frequency grids, thereby modifying the electrical charge in the air, drastically reduced the apparent odor concentration. Test subjects report a doubling of odor level within 20-30 minutes after the low frequency energy is turned off. In further experimentation with radar wavelength energy using intact animals, a decrease in heart rate occurred when radar pulses impinged on the subject at the occurrence of the electrocardiogram R wave. Radar pulses impinging at the T wave had no effect.

  1.2 Ghz pulsed modulated energy at average power densities of less than 14 was used. This average power density is less than might be expected in some operational situations.

Frey, A., "Effects of Microwaves and Radio Frequency Energy on the Central Nervous System," TR 1-70, Sep 1969

PREVIOUS EDITION OF THIS FORM IS OBSOLETE

## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

15 May 1970

Dr. Gilbert Tolburst (code 454) Office of Naval Research Washington, D.C.

Dear Dr. Tolhurst:

Enclosed is the renewal proposal for Contract number N00014-69-C-0181.

All reporting requirements have been met to date. semi-annual report is not due until 15 August. - Returned 18 May 1970 Joan

I would appreciate it if you would return the self address card that is enclosed.

Sincerely,

A. R. Zandle

enc. ARZ/jg

## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

1215 OL 9-6228

Request for Renewal of Contract NGOO14-69-C-0181

The Effects of Ionized Air and Radio Energy upon the Performance
of Mayal Personnel

Allan H. Frey . May 1970

Collan H. Tra-Principal Investigator

Secretary-Treasurer

## Budget.

Professional personnel (senior)	5.5 MM	@ 1490/mo	8,195
Technician	10 MM	@ 436/mo	4:360
Employee benefit		<b>6</b> 17 <b>%</b>	2,134
Material (small equipment items)			705
Travel (Includes NATO meeting in Munich	)		520
Indirect		<b>6</b> 24 <b>%</b>	3.819
Fee		@ 7.8%	1,539
Total		,	
			\$21,272

ONR WORKSHEET FOR INDIVIDUAL PROCUREMENT ACTION RE, LAT (DD-350) NAVSO 4200/6 (REV. 11-68)

CONTRACTOR (Name and Address)						
Randomline, Inc.				ADMIN. OFFICE		
York & Moreland Road						
Willow Grove, Pennsy	S ]			DCASR	Phila. Pa. 3	39
	rvania 1909	<del>3</del> 0			CE (Name and Account No	
Atten: Allan H. Fre	7			DCASR	Phila. 5704	
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THER (Specify)				currentl	у	144-246
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·				QUIRED		STATUS
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## ONR PROCUREMENT REQUEST AND APPNOVAL NAVSG 3900/3 (REV. 11-68)

7. CONTRACT DESCRIPTION OF WORK

		1. SUBMISSION DATE	2. CURRENT SEC	URITY			
		.22 Dec 69	DD-254 DATED		NONE X		
3. TASK TITLE (UNCLASSIFIED EAM TITLE REQU	JIRED)			s. REC	COMMENDATION		
			A. INSTRUME	ти	b. TYPE OF ACTION		
EAM: Behavioral Biophys	sics		CONTRACT		NEW		
4. CONTRACTOR (NAME AND LOCATION OF WO.	RK PERFORM	ANCE)	CONTRACT	X	RENEWAL		
Randomline, Inc.	_				ACCELERATION		
Old York & Moreland Road			GRANT	1	EXPANSION A		
Willow Grove, Pennsylvan	nia 19010		OTHER		EQUIPMENT LOAN		
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					NO-FUNDS EXTENSION		
B. PRINCIPAL INVESTIGATOR					REDUCTION		
A. H. Frey				1	REOPENED		
6. BASIS FOR CONTRACTOR SELECTION		8. EXPENDITURE RATE		1	CORRECTION		
(New procurement only)	a. FY	b. AMOUNT	IO, PERIOD TO B		ERED SY THIS PROCUREMENT		
UNSOLICITED PROPOSAL					•		
SOLE SOURCE			FROM 15	leb	70 _{To} 14 Feb 71		
SOLICITATION							

To perform research simed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior. The purpose of this FR is to permit the contractor to acquire three special equipment systems developed under a previous contract by the present principal investigator. This will permit the work to include studies of olfaction functioning and related neural-electric responses.

PODZ 12. CONTRACT NUMBER 13. TÁSKÍSUBERVÍSÓR (Signalate) / 114-246 DONALD P. WOODWARD (formerly NR N 0001L-69-C-0181 NR 14. SOURCE OF FUNDS IS. FOR USE OF COMPTROLLER'S OFFICE a. cope b. SUB-PROJECT (TASK AREA) BUREAU AUTH. TRANS. & AMOUNT APPROPRIATION COST CODE END ITEM AND TASK NR NO. GLASS CONTROL NO. ACCT.NO. TYPE AGENCY REOO6-02-02, 1-12 17X1319.14 501 MR 144-246 (42) -0-454 NFC 31 769 PM f. AMOUNT APPROVED IS. COMMITMENT (initials and date) (Code) OFFICE OF - PROCUREMENT SERVICES GROU 7. DR APPROVALS (Typed names and signatures) DIVISION DIRECTOR PROGRAM DIREC DEC 22 1969 G. L. HRYAN æ. Tolhuest DIRECTOR OF RESEARCH DEPUTY DIRECTOR OF RESEARCH (RESEARCH) R. TRUMBULL A. W. PRYCE **▲**科科 2 2 70 80 70 **5**0

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NAME:	,,	<del>"</del>		TELEPH	ONE	/// 215	014-6	228	
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*Available to contractors upon originator's approval

#### RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

December 3, 1969

Physiological Psychology Program Office of Naval Research (454) Washington, D. C.

Dear Sir:

We wish to request that contract NOO014-69-C-0181-P001 be amended to provide Randomline, Inc with the three special systems detailed on the attached.

As we stated in our proposal, we would expand the scope of the work into the area of electrical gradient phenomena at no additional cost if these unique systems were provided to us. In as much as the Scientific Officer can now provide the systems and wishes us to expand the scope of the work as soon as the contract can be amended, we are submitting this request.

Beside the experimentation with crustaceans and cardiac response to rf energy to which we are now contractually committed, we will expand the scope of the work to do in addition a study on electrical gradient manipulation and effect on the olfactory mucosa response if these systems are provided. We will evaluate the gradient effect on the EOG and higher neural interactions.

This additional work has considerable significance to the Navy and pirect application to certain problems in submarines as well as other applications. It is expected that the data that would result would have bearing on long term habitability aboard ships and lead to means to increase personnel effectiveness.

Randomline will not profit from the provision of these unique systems. These systems were specially developed and assembled for the Navy at considerable cost to the government and can only be used in this particular application. They can not be used for general purposes in system form. Neither can the individual components be used since they were radically modified in integrating them into the systems and they can not be returned to their original state.

In as much as HRB-Singer used the systems locally (the HRB project director who is now employed by us used them in the adjacent township), we can take on accountability for the systems without incurring shipping costs against ourselves or the government.

HRB Contract no0014-66-0-0341

Thus, it would be in the best interest of the Government to expeditiously provide the unique systems, developed at considerable cost to the government, so that we can expand the scope of the work by adding the additional task for which the systems were designed. This is a task whose results will have wide application and be of considerable significance to the Navy.

Sincerely,

Allan H. Frey

AHP/bf

#### Systems

The system components listed are not in the condition as purchased seven years ago. Most of them lack parts that were discarded in the building of the systems, have extensive wiring and subcomponent changes for which there are no schematics, require auxillary equipment to operate due the changes made in them (said auxillary equipment and specifications are not included) or have mechanical changes that limit their function. There are no instruction books available on these special purpose systems to provide information on switch sequencing, allowable or necessary voltages, application, etc.

Data Analysis System consisting of the following listed items of Government Furnished Property incorporated into system:

> USN-1-0341 Camera Polaroid. Mcdel 104 USN-6-0341 Computer of Average Transients, Model 1000 USN-7-0341 Trandacet Stracham USN-10-0341 Senior Voltahayst USN-13-0341 Audio Cenerator, RCA Model WA-44-C USN-17-0341 Electrometer, Keithly USN-20-0341 Power Supply, P-8-12/24 USN-25-0341 Culmotive Recorder, Gerbrand USN-33-0341 Scope Camera, Tektronix C-12 USH-36-0341 Stop Watch USN-49-0341 Camera USN-53-0341 Dynograph, Beckman Model 542, S/N 297 USN-54-0341 Biological Amplifier, Model DS2C USN-55-0341 Recorder, Esterline-Angus, Model A620% USN-56-0341 Dictating Machine, IBM, S/N 513583 USN-57-0341 Oscilloscope, Tektronix Model 565 with (I) 2A61 and (I) 2A63 Amplifier USN-63-0341 Screen Room

Specimen Set-up System consisting of the following items of Government Furnished Property incorporated into system:

1. USN-3-0341 Pressure Cooker

2. USN-4-0341 Respiration Regulator

USN-5-0341 Pipecte Puller, KOPF USN-11-0341 Lacygnscope USN-12-0341 Blood Pressure Gauge . USN-22-0341 Motor, Part of Rat Box, Newark CMO USN-30-0341 1/2" Electric Drill, W/Stand, Craftsman USN-31-0341 Bovine Electorsutery USN-32-0341 Stereotoxic Instrument, KOPF 1204 USN-34-0341 Ministrue Micromatipulator, Model IM-3 USN-85-0341 Belance Scale, Ohaus, Mode 1. 3502 USN-38-0341 Microscope, B & L Model 313353 USN-39-0341 Pump, Cole Parameter, 7064-5 USN-42-034) Car Skeleton USN-43-0341 Vaporizer USN-44-0341 Electrical Drill. Osteological USN-45-0341 Ear Bars, (Part of USN-32-0341) USN-46-0341 Regulator, 306-0071-USN-48-0341 Bright Spot Headlight USN-58-0341 Transducer; Grass/FT-03B USN-60-0341 Balance Scale, SEKO, Model [137] USN-61-0341 Laboratory Oven. LaPine 317-85

Behavioral Assay System consisting of the following items of Government Furnished Property incorporated into system:

> USN-8-0341 Program Timer, TM-15K391 UEN-9-0341 L Band Oscillator, Applied Microwave USN-14-0341 Laboratory Simulator, AEL Model 104A

USN-15-0341 Photic Simulator, AEL Model 127 USN-16-0341 Stimlus Isolator. AEL Model Il2 USN-18-0341 Power Oscillator, Microdot 411A USN-19-0341 Coax To Waveguide Adaptor, Scientific Atlanta : USN-21-0341 Lo Power Terminator, Microlab TA5MB USN-25-0341 Coax Attenuator, Empore AT50-10 USN-24-0341 Coax Attenuator, Empire AT50-40 USN-26-0341 Lo-Pass Filter, H/P Model 360A USN-27-0341 Thermistor Mount, H/P Model 477B USN-29-0341 Bench Saw W/Motor Craftsman USN-37-0341 Programmer, Fohringe: USN-41-0341 40 Drawer Parts Cabinet USN-51-0341 Programmer, **Forhinger** USN-52-0341 Programmer, Forhinger USN-59-0341 Pellet Dispenser. **Forhinger** USN-62-0341 Horn Antenna, Model 11-1-1

ONR WORKSHEET FOR INDIVIDUAL PROCUREMENT ACTION REPORT (DD-350)

NDIVIDUAL PROCUREMENT ACTIO AVSO 4200/6 (REV. 11-68)						
Randomline, Inc.  York & Moreland Ro  Willow Grove, Penn Attention: A. R.	sylvania	19090	DCASE	Philad	elphia	39
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THER (Specify) ESCRIPTION OF CONTRACTUAL SERVICES				<u>_</u>		
Note #1: Attach Individual F form DD-350 as part	rocurement Acti	evioral - So		#9. Powi	ew check-list bel tional contract p	ow for completion of reparatory actions.
fill in data as app	ilcable.	<u></u>	REOL	ILRED		STATUS
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SOLE SOURCE

Kebun 8/20 ONR PROCUREMENT REQUEST AND APPREAL 2. GURRENT SECURITY REQUIREMENTS NAV50 3900/3 (REV. 11-68) 1. SUBMISSION DATE 6 August 1969 s. RECOMMENDATION 3. TASK TITLE (UNCLASSIFIED EAM TITLE REQUIRED) TYPE OF ACTION INSTRUMENT NEW Behavioral Biophysics CONTRACT X RENEWAL 4. CONTRACTOR (NAME AND LOCATION OF WORK PERFORMANCE) ACCELERATION Randomline, Inc. GRANT EXPANSION Old York & Moreland Roads EQUIPMENT LOAN Willow Grove, Pennsylvania 19090 OTHER OVER-RUN NO-FUNDS EXTENSION REDUCTION S. PRINCIPAL INVESTIGATOR REOPENED CORRECTION A. H. Frey 8. EXPENDITURE RATE 10. PERIOD TO BE COVERED BY THIS PROCUREMENT ACTION (enter dates) 6. BASIS FOR CONTRACTOR SELECTION b. AMOUNT (New procurement only) 70 8,720 FROM 15 Feb 70 To 14 Feb 71 UNSOLICITED PROPOSAL 12,210 71

SOLICITATION 7. CONTRACT DESCRIPTION OF WORK To perform research simed at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior.

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- (U) Air ions: (U) electromagnetic energy: (U) nervous system: (U) electrophysiological at technical objective, 21 Approach, 25 Procress (Funds individual paragraphs identified by number. Procede text of each with Security Classification Code.)

  23. (U) Within the Navy, there are many relatively closed spaced in which personnel are exposed to varying levels of electromagnetic radiation and/or ionized air which could effect individual performance. This work unit is concerned with the effects of exposure to radio frequency energy and ionized air on neural activity and behavior.
- 24.(U) Work planned for the coming year included (1) experiments on the mechanism of the neural effect of radar wavelength energy, (2) additional experiments on the effects of exposure to radio frequency energy on heart function, and (3) further work on the relationship between air ionization and olfaction.
- 25.(U) Preliminary results of experimentation done in the few months this contract has been active indicate that the electrostatic environment (subject, equipment, walls, etc.) influence the outcome of experiments in olfaction and serosol deposition. The electrical responses of olfactory tissue to adorants also was demonstrated to be a function, in part, of the method of delivery. By controlling the environment and stimulus delivery methods, rather different electrical responses have been recorded than previously found. If confirmed these data will require new interpretation of the electrical response and probably of the mechanism of olfaction. An improved experimental system for examining the effects of radio frequency energy on heart function has been set up and debugged.

No reports distributed because of recency of contract.

*Available to contractors upon originator's approval

## RANDOMLINE, INC.

#### Glenside Avenue & Limekiln Pike

Glenside, Penna. 19038

(215) TU 7-3121

June 20, 1969

DCASR P.O. Box 7478 Philadelphia, Pa. 19101

ATTN: DCRP-COK-C

RE: Request for renewal of contract NOO014-69-C-0181

Gentlemen:

Enclosed is our proposal for renewal of the above cited contract. All reporting requirements have been complied with to date.

Sincerely,

a. R. Landley

A. R. Zandle

ARZ/bf

c.c. Procuring Contract Office (code 622)
Office of Naval Research
Washington, D. C. 20360

## RANDOMLINE, INC.

Glenside Avenue & Limekiln Pike Glenside, Penna. 19038

(215) TU 7-3121

Request for Renewal of Contract NCOO14-69-C-0181

Experimentation on the Electrical Environmentation and Neural Function

Allan H. Frey

allen Fren

Principal Investigator

Secretary-Treasurer

In previous years, our experimentation has been primarily concerned with the behavioral and physiological effect of radar wavelength rf energy and the effect of variation in level of air ionization such as that induced by closed environments, electronic equipment, and nuclear energy.

We have established that rf energy can evoke potentials in the brain stem and experimentally defined the critical variables in the effect.

We have also used the isolated frog heart to study the effect of rf energy on an autoactive system. A rather marked effect appeared at low power density with certain stimulation parameters. The writer observed somewhat similar effects on the heart of intact monkeys in limited pilot experimentation several years ago. This year, we have been studying the effect of rf energy on the autoactive neural system of crustaceans in order to determine the mechanism of the rf effect.

On the basis of these data and the development of a general view of neural function in which the CNS is regarded as a solid-state system, certain experiments with rf energy are clearly indicated. First, the experiments with the autoactive neural system of crustaceans will be extended in order to obtain definitive information on the mechanism of the neural effect of radar wavelength energy. These experiments will include threshold and histogram procedures. There will also be joint projects with another lab to further define at the molecular level the nature of neural functioning. Then there will be a return to data collection with intact mammals using S band radar. The theoretical view developed suggests the need for experiments in S band, as well as in the adjacent L band in which we have done much of our work, due to a possible effect of rf energy on OH bonds.

The work with the crustaceans has reached a natural break point so we will shift the rf work to the use of the frog heart. We shall

sychronize the pulse of rf energy with the T wave to extend and clarify our previous findings on cardiac function.

In our experiments with air ions, we earlier established that small negative ions affect the functioning of the nervous system as indicated by change in the conditioned emotional response. We also defined the critical variables to control in order to carry out definitive studies with air ions. This work was extended to another area this past year in an analysis of the contradictory results that have been obtained in the area of olfaction. It was shown that the contradictory experimental results in the literature were probably due in large part to the lack of control over air ionization and The findings with air ionization and electrical field gradients. olfaction help to clarify the mechanism of olfaction. A technical report in MS form will be submitted on this within the next few weeks. We shall soon extend this work further assuming the availability of the GFE Data analysis system, Specimen set-up system, and Behavioral assay system that has been discussed with Scientific Officer.

All of this experimentation can not be done in this coming year, but it will be carried as far as possible.

## Budget Estimate

Professional personnel (senior)	6MM @ 1408/mo	8,448
	10MM @ 435/mo	4,350
Engineering assistant	© 17%	2,176
Employee benefit	ent items)	915
Materials (subjects and small equipme Travel (for technical discussions with	th other investigators)	290
Travel (for technical discussions wa	@ 20%	3,235
Indirect	@7 <b>.</b> 8%	1,516
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Total		\$ 20,930
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STATEMENT ON DIRECT AND APPARENT RELATIONSHIP TO A SPECIFIC MILITARY FUNCTION OR OPERATION PURSUANT TO PL 91-121, FY 1970 AUTHORIZATION ACT

1. The work to be accomplished under this contract/grant relates to establishment of the effects of exposure to radio frequency energy on neural activity and subsequent behavior.

CALBERT C. TOLHURST

SCIENTIFIC OFFICER

This contract/grant is certified to meet the requirements of Section 203 as indicated in paragraph 1. above. 2.

TOTLEME C. TOLIMASE

A. M. Yaman

DEPUTY DIRECTOR OF RESEARCH (RESEARCH)

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DIRECTOR OF RESEARCH

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No reports distributed because of recency of contract.

ONR MARKSHEET FOR LIVI AL PROCUREMENT ACTION REP! (086-00, NAVSO 4200/6 (REV. 10- 68) ADMIN. OFFICE CONTRACTOR (News and Address) Philadelphia 39 DCASR Randomline, Inc. Glenside Avenue & Lime Liln Pike DISBURSING OFFICE (Name and Account Na.) Glenside, Pennsylvania 5704 Attn: Mr. A. Zandle Philadelphia DCASR CONTRACT IDENTIFICATION AMENDMENT NO. CONTRACT NO. C(P) N00014-69-C-0181 FIRM FIXED-PRICE 8 ٨ NR HO. COCUMENT TO HE DATED 144-246/8-23-68 COST TYPE 15 February 1969 OTHER (Specify) DESCRIPTION OF CONTRACTUAL SERVICES AlM1 - Behavioral-Social Sciences Review check-list below for completion of Note #2: Attach Individual Procurement Action Report additional contract preparatory actions. form DD-350 as part of this Worksheet and fill in data as applicable. STATUS REQUIRED CHECK LIST OF PREPARATORY ACTIONS YES NOT RECEIVED X RECEIVED STATEMENT FROM CONTRACTOR RE USE OF COMPANY OR PERSON TO SOLICIT X X CONTRACTING OFFICER'S STATEMENT NO. X NEGOTIATION CLEARANCE (NAVEXOS-2759) AUTHORITY TO CONTRACT - "BUSINESS" CLEARANCE (NAVEXOS-2760) X 37659 20,680-00 X METHOD OF CONTRACTING (D & F) 37658 X NEGOTIATION D. & F X DD-254 (If required, identify: Basic; Amend.; Annex; Other) 454 ONR TECHNICAL CODE BUREAU Rouge'à s ACTION DATES PR OR REQUISITION DATED ...... 23 Aug 1968 PR/REQUISITION RECEIVED IN CODE 600 . 11 Sept 1968 PROCUREMENT PACKAGE RELEASED FROM REGOTIATION ..... FEB 2 6 1969 MAILED TO CONTRACTOR ....... 6 MAR 1969 FINAL EXECUTION ************* 15 Feb 1969 BEGINNING DATE OF CONTRACT ACTION ... 2) for (4 120 Tallera

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# RANDOMLINE, INC.

Glenside Avenue & Limekiln Pike Glenside, Penna. 19038

(215) TU 7-3121

August 8, 1968

Dr. Gilbert Tolhurst (454) Head, Physiological Psychology Branch Office of Naval Research Washington D. C.

Dear Dr. Tolhurst:

Enclosed for your review and consideration is our proposal "Electrical environment and neural function" written by Allan H. Frey. It is concerned with experimentation to determine the nature of the effect of radar frequency energy and electrical space charge on neural function.

If you have any questions of a technical nature, please contact A. H. Frey. Questions on administrative matters should be directed to the undersigned.

Sincerely,

a. Zandle

A. Zandle

AZ:mgf Enclosure

AUG 7 158

act for

5B1 Mount Vernon Gardens Glenside, Pa. 19038 July 30, 1968

Dr. Gilbert Tolhurst (454) Head, Physiological Psychology Branch Office of Naval Research Washington, D. C.

Dear Gib:

My tentative decision to stay in the Glenside area is now definite. I will continue my experimentation here and will work jointly with the people in other disciplines scattered around here who are also interested in the same things as I.

I will continue in my position at HRB on a part time basis even after I complete the accelerated work on the present contract. I would prefer, however, to initiate a new contract which would be with Randomline, Inc. rather than renew the old one with HRB since Randomline will be home base. I've enclosed a copy of the proposal. The official copies should reach you in about a week.

If you have any questions, I can be reached at Randomline. I am doing the rf work there as well as the olfactory experiments. I'll be leaving the latter part of this week and will be away all of next week. I shall be visiting several labs. I'm looking forward to having an interesting time with John Gaito.

With best regards, I am

Sincerely,

Allan H. Frey

allen

AHF/bwf

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No WHY Pr

# RANDOMLINE, INC.

Glenside Avenue & Limekiln Pike Glenside, Penna. 19038

(215) TU 7-3121

A Proposal for Experimentation on the Electrical Environment and Neural Function

Allan H. Frey

In previous years, our experimentation has been primarily concerned with the behavioral and physiological effect of radar wavelength rf energy and the effect of variation in level of air ionization such as that induced by closed environments, electronic equipment, and nuclear energy.

We have established that rf energy can evoke potentials in the brain stem and experimentally defined the critical variables in the effect.

We have also used the isolated frog heart to study the effect of rf energy on an autoactive system. A rather marked effect appeared at low power density with certain stimulation parameters. The writer observed somewhat similar effects on the heart of intact monkeys in limited pilot experimentation several years ago. This year, we have been studying the effect of rf energy on the autoactive neural system of crustaceans in order to determine the mechanism of the rf effect.

On the basis of these data and the development of a general view of neural function in which the CNS is regarded as a solid-state system, certain experiments with rf energy are clearly indicated. First, the experiments with the autoactive neural system of crustaceans will be extended in order to obtain definitive information on the mechanism of the neural effect of radar wavelength energy. These experiments will include threshold and histogram procedures. There will also be joint projects with another lab to further define at the molecular level the nature of neural functioning. Then there will be a return to data collection with intact mammals using S band radar. The theoretical view developed suggests the need for experiments in S band, as well as in the adjacent L band in which we have done much of our work, due to a possible effect of rf energy on OH bonds.

In our experiments with air ions, we earlier established that small negative ions affect the functioning of the nervous system as indicated

by change in the conditioned emotional response. We also defined the critical variables to control in order to carry out definitive studies with air ions. This work was extended to another area this past year in an analysis of the contradictory results that have been obtained in the area of olfaction. It was shown that the contradictory experimental results in the literature were probably due in large part to the lack of control over air ionization and electrical field gradients. A solution to these difficulties was offered.

Since the CER line of investigation with ions is being extended by other investigators with positive results, we shall delve more deeply into the mechanism of the effect. We now have a "clean chamber" available and very good control of the environment including space charge. We shall extend the work with increased ion concentrations using a brain implant preparation (Poschel's technique). We will be particularly interested in the effect of  $\operatorname{CO}_2^+$  since another investigator has recently obtained behavioral data which, taken with our  $\operatorname{O}_2^-$  data, suggests that our hypothesis on the mechanism of  $\operatorname{O}_2^-$  and  $\operatorname{CO}_2^+$  may be substantially correct.

All of this experimentation can not be done in this coming year, but it will be carried as far as possible.

# Budget Estimate

Systa	Professional personnel (senior) 6MM @ 1408/mo  Engineering assistant 10MM @ 426/mo  Employee benefit @ 14%	8,448 4,260 1,778
* 100 l	Materials (subjects and small equipment items.)  Travel (for technical discussions with other investigators.)  Indirect  8 7.8%	1,120 380 3,198 1,496
	Total	\$ 20,680

Paper

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## DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH

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Executed copies of the attached contract document have been forwarded by the Office of Naval Research to the principal participants (identified on this list by asterisk); other copies have been forwarded to interested activities as indicated below. Consistently, any activity issuing a modification to the basic contract should supply copies to all original recipients.

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## CHRITRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO: POOC05

- 1. In Block Number 21 of the Face Page of the Contract, delete the figure "\$93,208.00" and substitute in lieu thereof the figure "\$178,058.00."
- 2. In Block Number 12 of the Face Page of Modification P00004, delete the "Completion Date" in its entirety.
- 3. Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety, and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOCOLL-69-C-Cl81, consisting of: Face Page; Schedule; Exhibit A, and General Provisions pages 1 through 29, identified as 'C(P) - October 1969.'"

4. Delete Section B of the Schedule in its entirety and substitute in lieu thereof the following:

#### "SECTION B - BPECIFICATION OF WORK

### Filme Item No. Supplies/Services

Amount

0001

Scope of Work and Reports - See Exhibit A, dated li February 1972, attached hereto,

(See Exhibit A)

and made a part hereof.

EAM TITLE: BEHAVIORAL BIOPHYSICS."

5. Delete Section C in its entirety and substitute in lieu thereof the following:

#### "SECTION C - PERIOD OF PERFORMANCE

The performance of work under this contract shall commence on 15 February 1969 and shall be completed on 14 February 1973."

6. Delete Section D in the entirety and substitute in lieu thereof the following:

#### "SECTION D - SCIENTIFIC OFFICER

The Scientific Officer under this contract is the Director, Physiology Programs, Biological and Medical Sciences Division, Office of Naval Research, Department of the Navy, 800 N. Quincy Street, Arlington, Virginia 22217."

- 7. Effective as of the date of this modification, Paragraph (1) under Section F, "Reports", shall read as follows:
- "(1) The Contractor shall submit not more than fifty (50) copies of status reports to the Scientific Officer on the dates specified in Exhibit A, and not more than one Hundred (100) copies of a final technical report to be distributed in accordance with the following distribution list:

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO: POOOO5

# Paragraph (1), Section F Continued

Addressee	DODAAD Code	Number of Unclassified	Classified
Scientific Officer Cognizant ONR Branch Office Administrative Contracting Officer Director, Naval Research Laboratory	100014 162879 53910A 100173	1 1 1 6	1 1 1 0
Washington, D.C. 20390 Attention: Library, Code 2029 (ONRL) Director, Naval Research Laboratory	NOO173	<b>&amp;</b> 6	1
Washington, D.C. 20390 Attention: Technical Information Division Defence Decementation Center. Building 5,	:547031	<b>35</b> 12	2 .
Cameron Station, Alexandria, Virginia 22314 Additional copies to be distributed in accordance with instructions furnished by the Scientific Officer	1000011	65	65

With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In the technical reports (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.

# 6. Delete Section G of the Schedule and substitute in lieu thereof the following:

## "SECTION G - PAYMENT INSTRUCTIONS FOR MULTIPLE FUND ACCOUNTING CITATIONS

In making disbursements from multiple appropriations under this contract, the Disbursing Officer shall make disbursements of appropriations on a first-in, first-out basis, except that Appropriation ACR: All and AE shall be used only in connection with Exhibit Line Item ACC2."

## 9. Add the following new Sections H, I, and J to the Contract Schedule:

## "SECTION H - MATERIAL INSPECTION AND RECEIVING REPORT (1969 DEC)

At the time of each delivery of supplies or services under this contract, the contractor shall prepare and furnish to the Government a Material Inspection and Receiving Report in the manner and to the extent required by ASFR Appendix I, Material Inspection and Receiving Report. Unless otherwise provided in the contract, the point of final inspection and acceptance is the Scientific Officer designated herein.

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the approval of the Scientific Officer, reprints of published articles may be beliabled as technical reports. In the technical reports (including reprints) believed horounder, there shall be affixed a face page which shall contain a that "reproduction in whole or in part is permitted for any purpose of United States Government," and a statement that the research was sponsored by Office of Naval Research, including the ONR Contract Number and the ONR Contract huriby identification number (NR-, Reqn., etc.). Where reports based upon research common under this contract are published in scientific and technical journals or the news releases are issued with regard to the work performed under this contract, and signal be included in such publications and news releases an appropriate statement anyloging that the research being reported was accomplished with the support of the thet of Mayal Research.

The Contractor shall include a completed "Document Control Data -- R&D" form (DD 11 1475) as the first page of each copy of the technical report prepared under this The form contains instructions for preparation. The cognizant Government Minute Administrator will provide assistance to the Contractor in obtaining the inco lorms. Administrative type reports, managerial (status) reports, and reprints 134304 as technical reports are excluded from this requirement.

Walses otherwise authorized in writing by the Contracting Officer, reports nereunder shall be reproduced only by duplicating processes and shall not 00 5.000 production units of any page or a total of 25,000 production units of A production unit means one sheet, size 8 x  $10\frac{1}{2}$ , one side englisherage report. one color. Technical reports are subject to further duplication by the Government Towar applied processes. This requirement will be observed during preparation and potion of the reports. Specifically, (i) reproduced text material will be in the of black characters on white opaque paper; (ii) half-tones will be kept to an Three minimum consistent with the communication of scientific and technical inforor theck-and-white linework is preferred; linework will be sharp and clear, of Additional density, and reproduced on white opaque paper; and (iii) material presented diant of charts, tables or graphs will appear in a final reproduced size large and to clearly legible. Graph coordinate rulings or grid lines will be spaced or the as practicable. Reprints of published technical articles are not within

CONTRACT NUMBER: NOOC14-MODIFICATION NUMBER: POOCC4

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7. Add the following new Section G of the Schedule:

## "SECTION G - PAYMENT INSTRUCTIONS FOR MULTIPLE FUND ACCOUNTING CITATION

"In amking disbursements from multiple appropriations under this contract bursing Officer shall make disbursements of appropriations on a first-in, first-contract except that Appropriation ACR: AD shall be used only in connection with Exhibit ACO2."

This modification increases the total price of Contract NOOO14-69-C-0181 by \$10,120.1 which increase is chargeable against the Appropriation set forth on Page 1, hore the

N00014-69-0-01 CONTRACT NUMBER:

CONTRACT EXHIBIT: CONTRACT LINE ITEM: 0001

15 November 1991 DATE:

#### Supplies/Services Item No.

The Contractor shall furnish the necessary personnel and facilities in the in accordance with such instructions as may be issued by the Scientific C. cer or his authorized representative within the scope of this contract, and A001 study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the constant of the study the effects of exposure to radio frequency energy and ionized the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of the study of performance.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	7 OB
A001AA A001AB A001AC	Status Reports Covering Subline Items 1AA through 1AJ Status Report Status Report	From 15 February 1969 Through 15 December 1970 15 February 1971 15 April 1971 15 June 1971	\$38,120.00 \$3,490.00 \$3,545.00 \$3,545.00	11. 2. 13 13 10 10
AOO1AD AOO1AE AOO1AF	Status Report Status Report Status Report Status Report	15 August 1971 15 October 1971 15 December 1971	\$ 3,545.00 \$ 3,545.00 \$ 3,545.00	AC AC
AOO1AG AOO1AH	Final Report	Due Not Later Than 14 April 1972	\$ 3,547.00	AC

The Contractor shall initiate and complete an analytical review of unique sensory systems which selected animals use in obtaining information stout A002 objects in their environments. The review is designed to provide information such as: what is the nature of the mechanism; does the system have potential useful application in development of a technique for classinging an object (man, mine, etc.) in the water or on the bottom; can the system be modeled; do we have all the necessary data for modeling; if not identify data requirements; what are possible limitations; and what improvements might make the system more useful in classifying objects in water.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

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	A002AC	Status Report	30 June 1971	\$7,581.00	200

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Randomline, Inc.					,	DATED	(See block 9)
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county, state, willow Grove, Penr	ısylvani	.a 190 <b>9</b> 0				CONTRACT/ORDER NOOO1 4-	-69-C-0181
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<b>L</b>						DATED 69 Feb 15	(See block II)
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9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF	SOLICITATIO	ons (N. A.)				is extended, [is i	ast extended
The above numbered solicitation is amended as s	et forth in bloc	k 12. The hour	and date	specified for recei	prot∪#te		Market Market
Offerors must acknowledge receipt of this amendment (a) By signing and returning capies of the	prior to the hou	r and date specified i	in the \$4	of this smandment	ended, by on pack s	one of the offer submitted; or (c)	By separate letter or
(a) By signing and returning to the solicitation to legacian which includes a reference to the solicitation TO THE HOUR AND DATE SPECIFIED MAY RESUlchange may be made by telegram or latter, provided s	ncy tejadiam i i IM KETECIII	on or room orren a letter makes refere	nce to	the solicitation and	this am	andment, and is received prior to	the opening how and
date specified.	J SUB-	AUTHOR'N	RAHS.		COUNTRY	1	AMOUNT
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in the second contact is modified	ed to reflect th	e administrative chan	ges (suc	h as changes in pa	ying offic	e, appropriation data, etc.) set t	with in block (2.
(c) X This Supplemental Agreement is entered into	pursuant to au	thority of 10 U.S	. C.	2304 (a) (1)			
It modifies the above numbered contract as s	et forth in bloc	k 12.					· · · · · · · · · · · · · · · · · · ·
12, DESCRIPTION OF AMENDMENT/MODIFICATION					. سرد	m-1 1060 bo	troop the
WHEREAS, Contract NOO014-6	9-C-018	1 was enter	red i	into as oi	לו	repruary 1909 De	otom parform
WHEREAS, Contract NOOUT4-0 Covernment and Randomline,	Inc.,	for the pu	pose	of provi	.ding	tnat the Concra	GOOL Perrorm
a program of research; and	l.						
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WHEREAS, it is desired that	t certa	in of the	Laus	ses in the	ra 40	mantmontal requi	rements: and
whereas, it is desired that contract be revised to con	form to	applicable	e sta	acutory ar	in ac	Dar owenner roder	2 0411022003
_	. 5 11	1 41	J 2007	risions be	rof	Tected in a sine	le document.
WHEREAS, it is further des	ired th	at the sal	orieta Nite	visions be	s and	obligations of	the Govern-
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COMPLETION DATE: 14 Febra	1arv 197	?2 <b>.</b>					
COMPLETION DATE: 14 FEOIS	e document refe	erenced in block 8, as	heretof	ore changed, remain	unchang	ed and in full force and effect.	<del>*************************************</del>
13. CONTRACTOR/OFFEROR IS NOT	₩ cours	ACTOD/DEEDDD R	SEULIDE	D YO SIGN THIS D	OCUMENT	AND RETURN 3 CO	PIES TO ISSUING OFFICE
REQUIRED TO SIGN THIS DOCUMENT	ECONTRA	CIGR/OFFEROR IS					<u></u>
14. NAME OF CONTRACTOR/OFFEROR			17.	UNITED STATES	OF AME	NIGO.	
			_ BY			(Signature of Contracting Officer)	
BY(Signature of person authori	zed to sign)		- <del> ,</del> -	NAME OF CONTR	ACTING	OFFICER (Type or print)	19. DATE SIGNED
15. NAME AND TITLE OF SIGNER (Type of print)		16. DATE SIGNED	19.	HAME OF CONTR			İ
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CONTRACT NUMBER: NOOC14-69-C-0181 MODIFICATION NUMBER: POO3

- 1. Effective as of the date of this modification, the General Provisions entitled "C(P) October 1969," pages 1 through 29, are hereby substituted for the General Provisions entitled "C(P) March 1967," pages 1 through 32, with "Alterations" thereto, and all subsequent modifications thereto issued prior to this Modification Number POO3.
- 2. It is the intention of the parties hereto that all references in the Schedule issued under this contract to any clause or clauses of the contract shall be deemed to refer to the corresponding or like clause or clauses of the General Provisions attached hereto.
- 3. Further, it is the desire of the Government and the Contractor that additional research on behavioral biophysics be performed. To accomplish this, there are hereby provided an increase in the total price and an extension in the period of performance of Contract NOCO14-69-C-0181. In consideration of the foregoing, said contract, as modified, is hereby further modified as follows:
- (a) On the face page of the contract, in Block Number 21, delete the figure "\$41,610.00," and substitute in lieu thereof the figure "\$62,882.00."
- (b) Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOOO14-69-G-0161, consisting of: face page; Schedule; and General Provisions pages 1 through 29, identified as  ${}^{\circ}G(P)$  - October 1969.

(c) Effective as of the date of this modification, Section B of the Schedule shall read as follows:

"SECTION B - SPECIFICATION OF WORK

# || Idne Item | Supplies/Services

1

Amount

The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Officer or his authorized representative within the scope of this contract, shall study the effects of exposure to radio frequency energy and ionized air on performance.

EAM TITLE: BEHAVIORAL BIOPHYSICS

CONTRACT NUMBER:
MODIFICATION NUMBER:

NOOO14-69-C-0181 POO3

Line Item No.	Supplies/Services		<u>Amount</u>
	1AA - Reports throug	h 15 August 1969	\$10,200.00
	1AB - Report of 15 0		3,490.00
	1AC - Report of 15 D		3,490.00
	1AD - Report of 15 F	ebruary 1970	3,490.00
	1AE - Report of 15 A		3,490,00
	1AF - Report of 15 J		3,490.00
	1AG - Report of 15 A	ugust 1970	3,490.00
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	14 Y	Total.	and the first than the second transfer of the second transfer of the second transfer of the second transfer of
		ems are to be submitted in mions E and F of the Schedule."	4 . <b></b>

(d) Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

#### "SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1972." [Out]

This modification increases the total price of Contract NOOO14-69-C-O181 by \$21,272.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

TOATE /

OSEPH RICHMAN

Contract Specialist

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THIS SPECIFICATION IS FOR:  One of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contrac	NUMBER must	R be	DATE TO BE COMPLETED (Estimated)	TH	is specification is: (See note below)	DATED
X PRIME CONTRACT NOON 4-69-0	C-0	181		X	a. ORIGINAL	20 July 23 Current
b. SUBCONTRACT (Use Item 8 to identify further subcontracting)	ст				b. REVISED (Supersedes all pre- vious specifications)	
G. INVITATION TO BID G. INVITATION FOR BID, OR REQUEST FOR FOR QUOTE FROPOSAL	REQUEST	FOR PR	ROPOSAL, OR REQUEST		C. FINAL	
5. IF THIS IS A FOLLOW-ON CONTRACT, ENTER PRECED	ING CON	TRACT N	UMBER AND DATE COMPLETE	D	DOES NOT APPLY	
CONTRACT NUMBER NOOCOLL 69-0-0181				DAT	E COMPLETED	
60. NAME AND ADDRESS OF PRIME CONTRACTOR (Includ-	e ZIP C	ode)			COGNIZANT SECURITY OFFIC	
Randomline, Inc.			Commands	2r,	DCA5 R	<u>}</u>
Old York & Moreland Roads			$\mathcal{P}_{\mathcal{H}}$		<u> </u>	
Willow Grove, Pennsylvania 19	010			N/A		
	•				Plack 1	6
7a. NAME AND ADDRESS OF FIRST TIER SUBCONTRACTOR (Include ZIP Code)	(If ap	plicabl	b. NAME AND ADDRES	S OF	COGNIZANT SECURITY OFFIC	E (Include
n/A				N/A		:
(Use Item 8 to identify further subcon	tractin	<u>a)</u>				
8. SUBCONTRACTING BEYOND FIRST TIER (as appropri	ate)					
n/A						
98. GENERAL IDENTIFICATION OF THE PROCUREMENT FO	R WHICH	THIS S	PECIFICATION APPLIES		hoborri	070
The effects of electromagnetic	energ	gy upo	on the nervous s	yste	ems and on behavi	.OJ. •
b. CONTRACT PRESCRIBES SECURITY REQUIREMENTS WHI	CH ARE	ADD(T)	NAL TO THOSE PRESCRIBED	ם אנו	D FORM 441 AND THE ISM	YES 🔯 NO
10. CONTRACT PERFORMANCE WILL REQUIRE	YES	NO F	REMARKS			
GRAPHIC ARTS SERVICES	X					
ACCESS TO CONTROLLED AREAS OR CLASSIFIED INFORMATION ONLY	X					
MANUFACTURE OF CLASSIFIED HARDWARE		X				
GENERATION, RECEIPT, OR CUSTODY OF CLASSIFIED DOCUMENTS OR OTHER MATERIAL	X					
ACCESS TO RESTRICTED DATA		X				
ACCESS TO CHYPTOGRAPHIC INFORMATION		Х				
ACCESS TO COMMUNICATION ANALYSIS INFORMATION		X				
DEFENSE DOCUMENTATION CENTER OR DEFENSE INFOR- MATION ANALYSIS CENTER SERVICES MAY BE REQUESTED (If yes, see paregraph T, app I, Industrial Security Manual,)	X		····			
<ol> <li>REFER ALL QUESTIONS PERTAINING TO CONTRACT S ACO (Item 14b); EMERGENCY, direct with writt</li> </ol>	en tecc	CLASSI ord of i	inquiry and response to	ACO)	(thru prime contractor	for subcontracts)
a. PROGRAM/PROJECT MANAGER OR ACTIVITY (Name, Ti	tie, an	d	ZIP Code)		NUMBER AND OFFICE SYMBOL	1
Organization of Mandware Willer C. TOLHURST, Director			Physiological Office of Na	l Ps aval	ychology Program Research OX6	s -1056 '
NOTE: Original Specification (Item 4a) is authorations (Items 4b and c) are authority for contractors shall be taken in accordance	er confi	røctora.	to remark the regraded	Class	illica information. Duci	Final Specifi- actions by

ONR CONTRACT DISTRIBUTION LIST RAYSO 4330/10 (REV. 9-68)

#### DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON, D.C. 20360

CONTRACT HO. 69-C-0181	MODIFICATION NO.	Jeh. 3, 1970	DISTRIBUTION DATE

Executed copies of the attached contract document have been forwarded by the Office of Naval Research to the principal participants (identified on this list by asterisk); other copies have been forwarded to interested activities as indicated below. Consistently, any activity issuing a modification to the basic contract should supply copies to all original recipients.

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* ADMINISTRATIVE CONTRACTING OFFICER			DIR., ONR BRANCH OFFICE PASADENA	3		PHILADELPH1A	1	
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NAVAL FACILITIES ENGI- NEERING COMMAND	1					PATENTS, CODE 315	ı	X
BUREAU OF MEDICINE AND SURGERY	1			6		SCIENTIFIC INFO. 4008.1	1	X
BUREAU OF NAVAL PERSONNEL	2		DISBURSING: NAVY REGIDNAL FINANCE CENTER:			ACCOUNTING, CODE 511	1	
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER	-5		3RD NAVAL DISTRICT BROOKLYN, N.Y.	1	:	PROCUREMENT SERVICES, CODE 603	1	
NAVAL RESEARCH LABORATORY	5		4TH NAVAL DISTRICT PHILADELPHIA, PENNA.	1		PROCUREMENT SERVICES, CODE 626	1	χ
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ARMY (Via ONR WASH. Code 511)	10		9TH NAVAL DISTRICT GREAT LAKES, ILL.	1		HEADQUARTERS, INSURANCE BRANCH, WASH., D.C.	1	
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ONTRACTOR: RANDOMLINE, INC.	Date: 1-28-70
ONTRACT NO: NOOO14-69-C-0181	Code: 616K
ODIFICATION NO: POO2	1
ne following information should be forwarded to the Administering	
1) Clearance Memorandum dated 28 January 1970	)
2) Other (indicate) MOD. POO2	
OUTING PUR- RECEIVED RELEASED COMMENTS (CODE NO.) POSE DATE DATE (Initial and date)	
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510A 1/28/20 Bk	
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The above numbered solicita								rs is extended, is n	ot extended.	
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The Changes set forth in	-		ove numbered a	ontract/or	der.					<del></del>
(b) The above numbered contr	ract/order is :	modified to ref	lact the adminis	strative ch	anges (suct	as changes in po	ying office	, appropriation data, etc.) set fort	h in block 13	2.
(c) XX This Supplemental Agreen	mont is ontere	d into pursuan	t to authority of	10 U.	S. C. 2	304 (a) (11)				_
It modifies the above num			n block 12.							
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ept as provided herein, all terms and	d conditions o	f the document	referenced in I	błock 8. trs	haretofore	changed, remain in	nehanood	and in full force and affect.		
CONTRACTOR/OFFEROR IS N REQUIRED TO SIGN THIS DO	TOF					TO SIGN THIS DOC			TO ISSUING	OFFICE
NAME OF CONTRACTOR/OFFER	OR				17. UN	ITED STATES OF	AMERIC	Α		<u></u>
					BY					
(Signature	e of person auti	orized to sign)					(Si	gnature of Contracting Officer)	••••	
NAME AND TITLE OF SIGNER (7			16. DATE		1			FICER (Type or print)	19. DATE	

## CONMRACT NO: NOOO14-69-C-0181 MODIFICATION NO; POO2

1. Effective as of the date of this modification, add the following new Section to the Schedule:

#### SECTION G - GOVERNMENT-FURNISHED PROPERTY

The Government will furnish to the Contractor as Government-Furnished Property for Juse under this contract, the following:

#### Item No.

#### Description

Cost

1

Data Analysis System consisting of the following listed items incorporated into system:

USN-1-0341 Comers Polaroid, Model 104 .USN-5-0341 Computer of Average Transients, Model 1000 USN-7-0341 Tranducer Arrotham USN-10-0341 Senior Volto homely set USN-13-6341 Audio Generator, RCA Model VA-44-C USN-17-0341 Electrometer, Keithly USN-20-0341 Power Supply, P-S-12/24 USN-25-0341 Culmotive Recorder, Gerbrand USN-33-0341 Scope Camera, Teltronix C-12 USN-36-0341 Stop Watch USN-49-0341 Camera USM-53-0341 Dynograph, Beckman Model 542, S/N 297 USN-54-0341 Biological Amplifier: Model DS2C USN-55-0341 Recorder, Esterline

Angus, Model A6201

IBM, S/N 513583

2A63 Amplifier

USN-63-0341 Screen Room

USM-56-0341 Dictating Machine,

USN-57-0341 Oscilloscope, Tektronix Model 565 with (1) 2A61 and (1) (Yotohmyst)

### CONTRACT NO: NOOC14-69-C-0181 MODIFICATION NO. POO2

Item No.

#### Description

Cost

2

Specimen Set-up System consisting of the following items incorporated into system:

USN-3-0341 Pressure Cooker USN-4-0341 Respiration Regulator

USN-5-0341 Pipette Puller,

KOPF

USN-11-0341 Laryguscope

USN-12-0341 Blood Pressure Gauge

USN-22-0341 Motor, Part of Rat

Box, Newark CMO

USN-30-0341 1/2" Electric Drill,

W/Stand, Craftsman

USN-31-0341 Bovine Electocautery

USN-32-0341 Stereotoxic Instrument,

KOPF 1204

USN-34-0341 Ministrue Micromanipulator,

Model MM-3

USN-35-0341 Balance Scale, Ohtus,

Model 3502

USN-38-0341 Microscope, B & L'Model

313353

USN-39-0341 Pump, Cole Parameter,

7064-5

USN-42-0341 Cat Skeleton

USN-43-0341 Vaporizer

USN-44-0341 Electrical Drill,

Osteological

USN-45-0341 Ear Bars, (Part of

USN-32-0341)

USN-46-0341 Regulator, 305-0071-

800

USN-48-0341 Bright Spot Headl_ght

USN-58-0341 Transducer, Grass FT-03B

USN-60-0341 Balance Scale,

SERO, Model 1137

USN-61-0341 Laboratory Oven.

LaPine 317-85

L. a. Dunsker

# CONTRACT NO: NOOOL4-69-C-0181 MODIFICATION NO. POO2

Item No.

#### Description

Cost

3

Behavioral Assay System consisting of the following items incorporated into system:

USN-8-0341 Program Timer TM-15K391 USN-9-0341 I Band Oscillator Applied Microwave USN-14-0341 Laboratory Simulator AEL Nodel 1044

USN-15-0341 Photic Simulator. AEL Wodel 127 USN-16-0341 Scimlus Isolator, AEL Model 112 USN-18-0341 Power Oscillator, Microdot 411A USN-19-0341 Coax To Waveguide Adaptor, Scientific Atlanta . USN-21-0341 Lo Power Terminator, Microlab TASMB USN-23-0341 Coax Attenuator, Empore AT50-10 USN-24-0341 Coax Attenuator, Empire AT50-40 USN-26-0341 Lo-Pass Filter, H/P Model 360A USN-27-0341 Thermistor Mount, H/P Model 477B USN-29-0341 Bench Saw W/Motor Craftsman USN-37-0341 Programmer, Fohringer 1182Ml USN-41-0341 40 Drawer Parts Cabinet USN-51-0341 Programmer, Forhinger USN-52-0341 Programmer, Forhinger USN-59-0341 Pellot Dispenser, Forhinger USN-62-0341 Horn Antenna, Model 11-1-1

# ONR CONTRACT DISTRIBUTION LIST NAVSO 4330/10 (REV. 9-68)

# DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON, D.C. 20360

ONR CONTRACT DISTRIBUTION CTS: MAYSO 4330/10 (REV. 9-68)	WASHINGTON, B.C. 20360	DISTUTION DATE 1969
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Randomlia	ne, Inc.				'		DATED	(See block 9)
(Street, city, Glenside	Avenue and	d Lime	ekiln Pike	<b>;</b>				,
and ZIP Glenside,	, Pennsylva	ania 1	19038			x	MODIFICATION OF CONTRACT/ORDER NOOO14	_60_0_0181
(Code)					1	ı		
							DATED 69 Feb 15	(See block II)
								<u>.                                    </u>
9. THIS BLOCK APPLIES ONLY TO AM								
The above numbered solicitation  Offerors must acknowledge receipt of t					•	•		not extended.
(a) By signing and returning	copies of this on	nendment: (	h) By ocknowledai	na receipt	of this amendment	on each c	any of the offer submitted; or le	By sapprote letter or
telegram which includes a reference to TO THE HOUR AND DATE SPECIFIE	the solicitation and	i amendmen	ntnumbers. FAILU	RE OF Y	DUR ACKNOWLED	GMENT T	'O BE RECEIVED AT THE ISS	UING OFFICE PRIOR
change may be made by telegram or let date specified.	tter, provided such	telegram o	r letter makes refi	rence to	the solicitation an	d this ame	indment, and is received prior t	o the opening hour and
10. SYMBOL AND SUBHEAD CLASS	BUREAU S CONTROL NO.	SUB- ALLOT.	AUTHOR'N ACCTG. ACT.	TRANS.	PROPERTY ACCTG. ACT.	COUNTRY	COST CODE	AMOUNT
								<del></del>
17X1319。1401 25	12501		14	2B	_	-	1K54	\$20,930.00
		<u> </u>						111-972-011
11. THIS BLOCK APPLIES ONLY TO MO	DIFICATIONS OF	CONTRAC	TS/ORDERS		•			
(a) This Change Order is issued ;						<del>_</del>	····	
The Changes set forth in block								
· —						ying attice	, appropriation data, etc.) set fo	with in block 12.
(c) X This Supplemental Agreement				O, C, 2	304 (2) (11)		<del></del>	
It modifies the above numbered 12. DESCRIPTION OF AMENDMENT/MOD		M IN DIOCK	·-··		<del></del>	<del></del>	· · · · · · · · · · · · · · · · · · ·	
12. DEGGAM FIRST OF PRINCIPLE IT FROM								
It is the desire of	of the Gove	ernmer	it and the	Cont	ractor th	at, ad	lditional resear	ch on
behavioral biophys	sics be per	rforme	ed. To ac	compl	ish this,	ther	e are hereby pr	ovided
an increase in the	price of	Contr	act N0001	4-69-	-C-0181, a	nd ar	n extension in t	he
period of performa	ince there	of.			•			,
In consideration of						by mo	dified as set f	orth
in the pages attac	ched hereto	o and	made a pa	rt he	reof,			
		•						
Except as provided herein, all terms and cor	nditions of the docum	nent referer	reed in block 8, as	heretofor	changed, remain u	inchanged	and in full force and effect.	
CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUME	Ент 🔀	CONTRACT	CR/OFFERCR IS R					ES TO ISSUING OFFICE
14. NAME OF CONTRACTOR/OFFEROR				17. Ut	HTED STATES OF	FAMERIC	A.	
8Y				. BY	······································		to a off a second	<del></del>
	person outherized to si		DATE SIGNED	10 20	NE OF CONTRACT		ignature of Contracting Officer) FICER (Type or print)	19. DATE SIGNED
15. NAME AND TITLE OF SIGNER (Type	or prist)	16,	DATE SIGNED	10. 6	WE OF CUNINA	≖rante O⊁	e receiv (1 Aba ot higg)	is, DATE STORED

CONTRACT NUMBER: MODIFICATION NUMBER:

N00014-69-C-0181 P001

1. On the face page of the contract, in Block Number 21, delete the figure "\$20,680.00," and substitute in lieu thereof the figure "\$41,610.00."

2. Under Section B of the Schedule, delete Line Items No. 1AA through 1AF in their entirety and substitute in lieu thereof the following:

"1AA - See Section F - Through 15 August 1969	<b>6</b> 40 560 60
1AB - See Section F - 15 October 1969	\$10,200.00 3,490.00
1AC - See Section F - 15 December 1969	3,490.00
1AD - See Section F - 15 February 1970	3,490,00
1AE - See Section F - 15 April 1970	3,490.00
1AF - See Section F - 15 June 1970	3,490.00
1AG - See Section F - 15 August 1970 1AH - See Section F - 15 October 1970	3,490,00
1AI - See Section F - 15 December 1970	3,490,00
1AJ - See Section F - Upon completion of work and	3,490,00
submission of final report	<u>3.490.00</u>
Total	\$41.610.00.

3. Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

#### "SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1971," WWW.

4. Effective as of the date of this modification, clause 42 of the contract, entitled "Patent Rights," shall read as follows:

#### "42. PATENT RIGHTS

"The following provisions shall apply to the work to be performed under this contract:

TYPIST: Please insert pre-printed multilith pages for (DEFERRED) (1968 SEPT) clause and number pre-printed pages in sequence beginning with 3.

5. Effective as of the date of this modification, the "ALTERATIONS IN CONTRACT (For C(P) - Merch 1967) of October 1968 and June 1969," which are attached hereto, are hereby substituted for the "ALTERATIONS IN CONTRACT (For C(P) - March 1967) of October 1968," which are attached to the General Provisions.

CONTRACT NUMBER:

N00014-69-0-0181

MODIFICATION NUMBER:

P001

This modification increases the total price of Contract N00014-69-C-0181 by \$20,930.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

SCHOOL DESCRIPTIONS

DATE

Jéséph Richman Contract Specialist

	/(DUAL PROCUREMENT AC N REPORT NO. (Current) 1B. 1C. REPORT NO. (Previous) 2. COI	REPORT CO. OL SYMBOL NA MAT 4200-2 NTRACT NO. (Army only) (Army	
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	Corrected entry     Reversing entry	7.0 MOP.	
tem 5 Code 0214	5. PURCHASING OFFICE AND MAILING ADDRESS Office of Naval Research, Procurement Set	rvices, Washington, D. C. 20360	
Item 5A Code	5A. SOUTHEAST ASIA (Actions of \$200,000 or more)  1. In support of SEA Ø. Not in support of SEA		
tem 6 Code	6. CONTRACTOR IDENTIFICATION  Company Name: Randomline, Inc.  Division Name (II any): Number and Street: Glenside Avenue & Lime City and State or Country: Glenside, Pennsylvania		
tem 7 Code City State	7. PRINCIPAL PLACE OF PERFORMANCE (Gity and State or	Country) 7A. 7B.	
. 39 Item 7C Code G	SAME 7C: MULTI-YEAR PROCUREMENT A. First year B. Second or subsequent year	C. Not a multi-year procurement	
Item 8 Code D	8. SUBJECT TO WALSH-HEALEY OR SERVICE CONTRACT AC A. Walsh-Healey Act, Manufacturer B. Walsh-Healey C. Service Contract Act D. Not subject to	CT · Act, Regular Dealer g Waish-Healey or Service Contract Act	
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3	<ol> <li>CONTRACT PLACEMENT</li> <li>Intragovernmental (Do not fill in items 16 thru 21)</li> <li>Two-step formal advertising (Do not fill in Items 17 thru 19)</li> <li>Other formal advertising (Do not fill in Items 17 thru 19)</li> </ol>	4. Small Business restricted advertising (Fill in all 19) 5. Other negotiated (Fill in all items) J. Forcign Military Sules (Do not fill in Items 16 thr	
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#### DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH MASHINGTON, D.C. 20350

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r Participants (iden	tified on this lies t	tornarded by the Off.	ice of Naval D .

Executed copies of the attached contract document have been forwarded by the Office of Naval Research to the principal participants (identified on this list by asterisk); other copies have been forwarded to interested activities as indicated below. Consistently, any activity issuing a modification to the basic contract should supply copies to all original recipients.

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#### FIXED PRICE SCHEDULE (4/20/67)

CONTRACT NUMBER:

NQ0014-69-C-0181

#### SCHEDULE

#### SECTION A - BASIC CONTRACT IDENTIFICATION

This Schedule is established under, and constitutes a part of, Contract NOO014-69-C-0181 , consisting of; face page; Schedule pages 1 through 3; and General Provisions pages 1 through 3; identified as "C(P) - March 1967," with Alterations thereto.

In the event of any inconsistency in this contract, the inconsistency shall be resolved by giving precedence in the following order; (a) the Schedule; (b) the General Provisions; (c) the other provisions of the contract whether incorporated by reference or otherwise; and (d) the Specifications.

#### SECTION B - SPEICIFICATION OF WORK

Line Item No.	Supplies/Services	Amount
1	The Contractor shall furnish the mecessary personnel and facilities for and, in accordance with any instructions issued by the Scientific Officer or his authorized representative, shall study the effects of exposure to radio frequency energy and ionized air on performance.	(FIXED PRICE)
	EAM TITLE: BEHAVIORAL BIOPHYSICS	
	1AA - See Section E - 15 April 1969  1AB - See Section E - 15 June 1969  1AQ - See Section E - 15 August 1969  1AD - See Section E - 15 October 1969  1AE - See Section E - 15 December 1969  1AF - See Section E - Upon completion of work	\$ 3,400.00 3,400.00 3,400.00 3,400.00 3,680.00
	Total Amount of Contra	act \$20,680.00
2 .	Reports - See Section	(Not Separately Priced

# NU0014-69-C-018/

### SECTION @ PERIOD OF PERFORMANCE

The performance of work hereunder shall commence on 15 February 1969 and shall be completed on 14 February 1970.

### SECTION D - SCIENTIFIC OFFICER

The Scientific Officer under this contract is the Head, Physiological Psychology , Office of Branch, Psychological Sciences Division Naval Research, Department of the Navy, Washington, D. C. 20360.

## SECTION E- PRICE AND PAYMENTS

- (1) Except to the extent otherwise provided herein, the Government shall pay to the Contractor as full compensation for the performance of work hereunder, the total price specified in Item 21 on Page 1, hereof. Upon receipt of properly certified invoices, and a certification by the Contract Administrator that status (progress) reports have been submitted in accordance with Section 1, hereof, payments shall be made, notwithstanding any provisions of clause 2 of the contract to the contrary, as specified herein; provided, however, that the final payment shall not be made until the Scientific Officer has received the final report from the Contractor and has certified receipt and acceptance thereof to the Contract Administrator.
- (2) The total contract price specified in this contract is based upon the understanding that the Contractor shall conduct the specified research program substantially in accordance with the proposal(s) upon which this contract (and subsequent Modifications thereto) is (are) based.
  - In the event that the performance of work under this contract is not substantially in accordance with the underlying proposal, it is understood and agreed that the parties hereto shall negotiate an appropriate reduction in the contract price or an extension in the period of performance of this contract.

SECTION - REPORTS

(1) The Contractor shall submit not more than Auty
of status (progress) reports on the data. 450 copies of status (progress) reports on the dates specified herein, and not more than (100) copies of a final technical report making full disclosures of all research conducted under this contract. The final technical report shall be distributed in accordance with a list approved and furnished to the Contractor by the Scientific Officer. With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In all technical reports (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract Authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.

- The Contractor shall include a completed "Document Control Data R&D" form (DD Form 1473) as the last page of each copy of every scientific and technical report prepared under this contract. The form contains instructions for preparation. The cognizant Government Contract Administrator will provide assistance to the Contractor in obtaining the required forms. Administrative type reports, managerial (status) reports, and reprints submitted as technical reports are excluded from this requirement.
- (3) Unless otherwise authorized in writing by the Contracting Officer, reports submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 single page reports or a total of 25,000 pages of a multiple-page report. To satisfy the requirements of the Defense Documentation Center, at least one copy of each technical report submitted to the Defense Documentation Center must be black typing or reproduction of black on white paper or suitable for reproduction by photographic techniques. Reprints of published technical articles are not within the scope of this paragraph (3).

DRAFT
APPROVED: 
Contract Specialist -WILLIAM C. SULLIVAN

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### DEPARTMENT OF THE NAV ) -OFFICE OF NAVAL RESEARCH ARLINGTON, VIRGINIA 22217

IN BEPLY REPENT

315:TWB:mvl 29 August 1973

From: Chief of Naval Research

To:

Commander, Perense Contract Administration Services Region

P. O. Box 7478

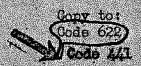
Philadelphia, Pennsylvania 19101

Subj: Contract NOOOL4-69-C-OISL, Randomline, Inc.

Endl: (1) DD Form 882 dtd 13 April 1973

1. Enclosure (1), the contractor's final report of inventions under subject contract, has been approved and is forwarded herewith.

T. M. BEIA By direction



ONR INTER-OFFICE ROUTE SHEET

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A - ACTION C - COMMENT

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Rendomline, Inc. Old York and Moreland Roads Willow Grove, Fennsylvania 19190

Attention: Allen H. Frey
Technical Director

Re: Contract H00014-69-C-0181:

#### Gentlemen:

It has been brought to the attention of this office that in the course of your performance of work under the above-referenced contract, two items have been developed which appear to be of a patentable nature. They are: (1) a new type of heart function sensor that involves no metal contact with the heart in the electromagnetic field as stated on page 3 of the Final Report dated 14 April 1973, and (2) a concept for a method or apparatus for the detection of submarged objects, also referred to as Electrical Field Discrimination, based on the study of fish as discussed on page 1 of the same Final Report,

Accordingly, in view of the invention reporting requirements of the Patent Rights (Deferred) clause of the contract, this is to request information on what consideration is being given to the timely submission of invention disclosures on these developments, or in lieu thereof, the reasons for nondisclosure, such as reasons why the developments are considered to be non-reportable items.

It is desirable that any disclosures to be submitted be in duplicate and that each include a concise explanation of the purposes, advantages, novel features, as well as an identification of the inventor and the inventor's place of residence and ditizenship. Information is also desired on the anticipated use of each development and any potential or existing statutory bar against patenting.

A response by Rendomline, Inc. in this matter within sixty (60) days of the date of this letter would be appreciated.

Sincerely yours,

ISTA F. KWITHIESKI A. F. KMITHIESKI Patent Counsel Non-Material Components By direction of Chief of Mayal Research

Copy to: DCASR/Philadelphia ONR Code 441 ONR Code 610 NAVSO 5216/5 (REV. 11-67) 9/N-0104-804-1752 DEPARTMENT OF THE NAVY

# Memorandum

DATE: 1-21-72

FROM C

Code 612

OT

Code 810

69-0-0181

SUBJ

Facility/Stowage Clearance

1. Please indicate below the facility and stowage clearance for:

Randomline, Inc.

Old York & Moreland Roads

Willow Grove, Pennsylvania 19010

FACILITY STOWAGE - Least

David A. Rodgers, Contract Negotiator

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Randomling, Incorporated Old York & Moreland Roads Willow Grove, Pennsylvania 19010

A. R. Zandle

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NAVSO 5216/5 (REV. 11-67) 5/N-0104-904-1752 DEPARTMENT OF THE NAVY

# Memorandum

DATE: 1-21-72

FROM Code 612

TO Code 810 69-C-0181

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1. Please indicate below the facility and stowage clearance for:

Randomline, Inc.

Old York & Moreland Roads

Willow Grove, Pennsylvania 19010,

STOWAGE

David A. Rodgers, Contract Negotiator

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C-16685

Randomling, Incorporated Old York & Moreland Roads Willow Grove, Pennsylvania 19010

A. R. Zandle

NOOO14-69-0-0181, POOO05

315:TMB:mvl N00014-69-C-0181 24 April 1973

From: Chief of Naval Research

To: Commander, Defense Contract Administration Services Region.

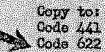
P. O. Box 7478, Philadelphia, Pennsylvania 19101

Subj: Contract NOCO14-69-C-0181, Randomline, Inc.

Ref: (a) DD Form 882 dated 13 April 1973

1. Reference (a), the contractor's final Report of Inventions and Subcontracts was forwarded to this office for approval. Approval of the report by this office is being withheld pending receipt and review of the contractor's final Technical report so that it can be determined if the contractor has complied with the reporting requirements of the Patent Rights clause contained in the contract.

A. F. KWITNIESKI By direction



Chief of Naval Research

Commander, Defense Contract Administration Services Region, From: Tor

Philadelphia (Attn: Mr. Donn, DCRP_DACE(T))

Contract NOO014-69-C-0181, Randomline, Inc. Bubj:

(a) DCASR, Philadelphia, Raval Message 270012% Feb 73 Ref:

1. In reply to reference (a), the final report is not due until 14 April 1973 and as of this date has not been received. In connection therewith, the Contractor should receive a signed copy of a DD 250 from the Scientific Officer upon receipt and acceptance of the final report and submit it with his invoice for payment due on Line Items ROOLAN and ACCEAJ.

> L. O. LINCOLN By direction

Copy to: OMI Coče 441

ROUTINE R 270012Z FEB 73 FM CMDR DCASR PHILA

TO OFC NAVAL RESEARCH/DEPT OF NAVY/PCO/ARLINGTON VA

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************ N C L A S S I F I E D******

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#### DEFENSE SUPPLY AGENCY

### DEFENSE CONTRACT ADMINISTRATION SERVICES REGION, PHILADELPHIA POST OFFICE BOX 7730

PHILADELPHIA, PENNSYLVANIA 19101

IN REPLY REFER TO

DCRP-FCCRA

7 April 1972

SUBJECT:

Adjustment of Payment Vouchet

Contract # N00014-69-C0181

Randomline, Inc.

TO:

Procuring Contracting Officer

Office of Naval Research Department of the Navy Arlington, Virginia, 22217

1.	Refere	ence:	D.	٥.	Vouch	er	# P66-0	64	, đa	ted	3/10/72	
fina	ancial	accour	nts	of	E.	J.	BANO,	LT,	SC,	USNR		

- 2. Above referenced voucher was processed as **********/final payment # 19 and charged to accounting station 000014
- 3. It is requested that the above payment be corrected to read partial/**** in lieu of *********/final.
- 4. Records of this office have been changed accordingly.

FOR THE COMMANDER:

M. LUCAS

FOR: LT. E. J. BANO, JR., (SC) USNR

Chief, Accounting & Finance Division

Office of Systems & Financial Management

5704 DSSN

Copy furnished:

Finance Center

Navy

DCRP-FL-F-130

Sept 71

Edition Jan 70 Obsolete

MAY 27 1971 1 44-246

### RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

May 26, 1971

Dr. Donald Woodward Psychophysiology Project Physiology Program (Code 441) Office of Naval Research 800 N. Quincy St. Arlington, Va.

Dear Dr. Woodward:

Enclosed for your consideration is our request for renewal of contract N00014-69-C-0181. Technical and progress reports have been submitted as called for with most progress reports made in person by the project director since the Scientific Officer and he finds it to be a more adequate means of communication than simple letter reports.

We do not expect to have a significant balance by the centract expiration date.

Sincerely,

A. R. Zandle

a. R. Landle

ARZ/bf

encl.

12. INFORMATION PERTAINING TO CLASSIFIED CONTRACTS OR PROJ	ECTS, EVEN THOUGH SUCH INFORMATION IS CONSIDERED UNCLASSIFIED, SHALL NOT D BY THE INDUSTRIAL SECURITY MANUAL (paragraph 5n and Appendix IX).
PROPOSED PUBLIC RELEASES SHALL BE SUBMITTED FOR APPROVAL P	
Physiological Psychology Programs	RIOR TO RELEASE DIRECT THROUGH (Specify)
Office of Naval Research (Code 454)	, Arlington, Virginia 22217
TO THE DIRECTORATE FOR SECURITY REVIEW, OFFICE OF THE ASSI ACCORDANCE WITH PARAGRAPH 50 OF THE INDUSTRIAL SECURITY MA	STANT SECRETARY OF DEFENSE (Public Affairs)* FOR REVIEW IN
*In the case of non-DoD user agencies, see footnote, parag	caph 5n, Industrial Security Manual.
13. SECURITY CLASSIFICATION SPECIFICATIONS FOR THIS CONTRA	CT ARE SET FORTH BELOW (Check which are applicable):
DD FORM 254C ATTACHED (hereby made a part of this	specification).
DOCUMENTIS) LISTED BELOW (hereby made pa	rt of this specification).
X AS STATED BELOW	
by ONR, DDC, other military agencies, may be retained for the duration of ta report has served its purpose it she security regulations, or returned to Upon completion of the contract all min accordance with current security mand authorized in accordance with part	as Secret may be supplied the contractor, and other DOD contractors. These reports the contract unless no longer needed. When would be destroyed in accordance with current the originating activity (if required). The remaining classified material will be destroyed regulations unless retention has been requested regraph 5 of the Industrial Security Manual.
Technical reports may be generated as	s high as Confidential under this contract.
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CONTRACT SECURITY CLASSIFICATION SPECIFICATIONS FOR OFFICIAL NAMED IN ITEM 146 BELOW:	SUBCONTRACTS ISSUING FROM THIS CONTRACT WILL BE APPROVED BY THE
REQUIRED DISTRIBUTION:	14. THIS CONTRACT SECURITY CLASSIFICATION SPECIFICATION AND ATTACH- MENTS REFERENCED HEREIN. APPROVED BY THE USER AGENCY CONTRACTING
PRIME CONTRACTOR (Item 6a)	OFFICER OR HIS REPRESENTATIVE NAMED BELOW:
COGNIZANT SECURITY OFFICE (Item 6b)	SIGNATURE //
ADMINISTRATIVE CONTRACTING OFFICE (Item 14b)	
MATERIAL INSPECTOR	(//h. /bumps
Director, Federal Burcau of Investigation WASHINGTON, D.C. (Only for Items 2a and 2b) (Attachments hereto not included.)	TYPED NAME AND TITLE OF APPROVING OFFICIAL GILBERT C. TOLHURST, Dir., Physiological Psychol
SUBCONTRACTOR (Item 7a)	a. APPROVING OFFICIAL'S ACTIVITY AND ADDRESS (Include ZIP Code)
COGNIZANT SECURITY OFFICE (Item 7b)	Office of Naval Research
ADDITIONAL DISTRIBUTION:	Arlington, Virginia 22217
	b. NAME AND ADDRESS OF ADMINISTRATIVE CONTRACTING OFFICE (Include ZIP Code)
□ <u>.</u>	ZIP Code) COECE / Colored Managerial

DEPARTMENT OF DEFENSE 🗠			THE MEDIAL MEMONTS OF CHARLES		D INDUSTRIAL SECURITY MAN	UAL APPLY TO
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2. 3- CONTRACT NUMBER THIS SPECIFICATION (Prime contract)	OR OTHER		DATE TO BE FORPER TO CLA DATE TO BE FOMPLETED (Estimated)	4.	O INFORMATION IS THE SPECIFICATION IS:	DATED
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INVITATION TO BID OR REQUEST FOR PROPOSAL FOR COUNTE	LINE CON		OCC. AND DATE COMPLET		FINAL	
5. IF THIS IS A FOLLOW-ON CONTRACT, ENTER PRECED	TING CON	TRACT NOW	BER AND DATE COMPLET		DOES NOT APPLY	•
contract number NOOO14-69-C-0181				J DA'	E COMPLETED	
6a. NAME AND ADDRESS OF PRIME CONTRACTOR (Includ	le ZIP Co	ode)	5 NAME AND ADDRE	SS OF	COGNIZANT SECURITY OFFICE	(Include
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Willow Grove, Pennsylvania 19	010		t .	N/A		
7a. NAME AND ADDRESS OF FIRST TIER SUBCONTRACTOR (Include ZIP Code)	(If app	olicable)	b. NAME AND ADDRE	SS OF	COGNIZANT SECURITY OFFICE	(Inc lude
n/a				N/A	<i>C</i>	
(Use Item 8 to identify further subcon	tracting	)				
B. SUBCONTRACTING BEYOND FIRST TIER (as appropri	ale)					
n/a						
98. GENERAL IDENTIFICATION OF THE PROCUREMENT FO	R WHICH	THIS SPEC	CEFICATION APPLIES			
The effects of electromagnetic	energ	y upon	the nervous s	yste	ems and on behavio	or.
b. CONTRACT PRESCRIBES SECURITY REQUIREMENTS WHI				•		
10. CONTRACT PERFORMANCE WILL REQUIRE	YES		ARKS	-		
GRAPHIC ARTS SERVICES	X_					
ACCESS TO CONTROLLED AREAS OR CLASSIFIED INFORMATION ONLY	X					
MANUFACTURE OF CLASSIFIED HARDWARE		X				
GENERATION, RECEIPT, OR CUSTODY OF CLASSIFIED DOCUMENTS OR OTHER MATERIAL	х					
ACCESS TO RESTRICTED DATA		X				
ACCESS TO CRYPTOGRAPHIC INFORMATION		х				
ACCESS TO COMMUNICATION ANALYSIS INFORMATION		х				
DEFENSE DOCUMENTATION CENTER OR DEFENSE INFOR- MATION ANALYSIS CENTER SERVICES MAY BE REQUESTED (If yes, see paragraph T, app I, Industrial Security Manual.)	x _					. <u></u>
REFER ALL QUESTIONS PERTAINING TO CONTRACT SI ACO (Item 14b); EMERGENCY, direct with writt	ECURITY en recor	CLASSIFIC rd of inqu	CATION SPECIFICATION uiry and response to	TO THE	E OFFICIAL NAMED BELOW (NO (thru prime contractor fo	ORMALLY, thru r subcontracts,
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GILBERT C. TOLHURST, Director			Office of N	aval	Research 692-45	05
NOTE: Original Specification (Item 4a) is authocations (Items 4b and c) are authority for contractors shall be taken in accordance	or contr	actors to	remark the regraded	Class	illied intormation. Such i	inal Specifi- actions by

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and zir Willow Grove	, Penn	.sylvan	úa 19	090	RECOF	m c	OPY	x	MODIFICATION OF CONTRACT/ORDER NOOO14-	69_C_0181
Code)									NO	
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The above numbered solicitation is any	ended as set	forth in bloc	ck 12.	The hour or	nd date spe	ecifle	d for receipt	of Oif	ers is extended, is no	t extended.
Offerers must acknowledge receipt of this ar	mendment pri	ior to the ho	ur and date							
(a) By signing and returning	nies of this	amendment:	(h) By ack	anowledaina +	receipt of t	hia a			come of the offer ask-true to a t-1 of	v senarate letter or
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CONTRACT NUMBER:

N00014-69-C-0181

MODIFICATION NUMBER: POOCOL

2. On the face page of the contract, in Block Number 21, delete the figure "\$62,882.00," and substitute in lieu thereof the figure "\$93,208.00."

3. Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOCO14-69-C-O181, consisting of: Face Page; Schedule; Exhibit A, dated 15 November 1970; and General Provisions pages 1 through 29, identified as 'C(P) - October 1969."

4. Effective as of the date of this modification, delete Section B of the Schedule in its entirety and substitute in lieu thereof the following:

## "SECTION B - SPECIFICATION OF WORK

"Line

Item No. Supplies/Services

Amount

0001

Scope of Work and Reports - See Exhibit A, dated 15 November 1970, attached hereto.

EAM TITLE: BEHAVIORAL BIOPHYSICS."

- 5. Effective as of the date of this modification, delete paragraph (1) of Section E of the Schedule in its entirety and substitute in lieu thereof the following:
- "(1) Except to the extent otherwise provided herein, the Government shall pay to the Contractor as full compensation for the performance of work hereunder, the total price specified in Block Number 21 on the face page hereof. Upon receipt of properly certified invoices and a certification by the Contract Administrator that status (progress) reports have been submitted in accordance with Section F, hereof, payments shall be made notwithstanding any provisions of clause 2 of the contract to the contrary, in accordance with Exhibit A, attached hereto and made a part hereof; provided, however, that the final payment shall not be made until the Scientific Officer has received the final report from the Contractor and has certified receipt and acceptance thereof to the Contract Administrator."
- 6. Effective as of the date of this modification, delete Section F of the Schedule in its entirety and substitute in lieu thereof the following:

## "SECTION F - REPORTS

"(1) The Contractor shall submit not more than fifty (50) copies of status reports to the Scientific Officer on the dates specified in Exhibit A, and not more than one hundred (100) copies of a final technical report to be distributed in accordance with the following distribution list:

CONTRACT NUMBER:
MODIFICATION NUMBER:

N00014-69-0-0181 P00004

Addressee	Number of Unclassified	f Copies Classified
Scientific Officer	1.	4
Cognizant ONR Branch Office	i	1
Administrative Contracting Officer	i	; 1
Director, Naval Research Laboratory	•	Į.
Washington, D. C. 20390		
Attention: Library, Code 2029 (ONRL)	6	0
Director, Naval Research Laboratory		U
Washington, D.C. 20390		
Attention: Technical Information Division	6	4
Defense Documentation Center, Building 5,		
Cameron Station, Alexandria, Virginia 22314	20	60
Additional copies to be Distributed in accordance	20	20
with instructions furnished by the Scientific		
Officer	65	44
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With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In the technical reperts (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract authority identification number (NR-, Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.

- "(2) The Contractor shall include a completed "Document Control Data R&D" form (DD Form 1473) as the first page of each copy of the technical report prepared under this contract. The form contains instructions for preparation. The cognizant Government Contract Administrator will provide assistance to the Contractor in obtaining the required forms. Administrative type reports, managerial (status) reports, and reprints submitted as technical reports are excluded from this requirement.
- "(3) Unless otherwise authorized in writing by the Contracting Officer, reports submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 production units of any page or a total of 25,000 production units of a multiple-page report. A production unit means one sheet, size 8 x 10½", one side only, one color. Technical reports are subject to further duplication by the Government by photographic processes. This requirement will be observed during preparation and production of the reports. Specifically, (i) reproduced text material will be in the form of black characters on white opaque paper; (ii) half-tones will be kept to an absolute minimum consistent with the communication of scientific and technical information; black-and-white linework is preferred; linework will be sharp and clear, of consistent density, and reproduced on white opaque paper; and (iii) material presented in the form of charts, tables or graphs will appear in a final reproduced size large enough to be clearly legible. Graph coordinate rulings or grid lines will be spaced as far apart as practicable. Reprints of published technical articles are not within the scope of this paragraph (3)."

CONTRACT NUMBER:

NOOO14-69-C-0181

MODIFICATION NUMBER: POOOOL

7. Add the following new Section G of the Schedule:

#### "SECTION G - PAYMENT INSTRUCTIONS FOR MULTIPLE FUND ACCOUNTING CITATIONS

"In making disbursements from multiple appropriations under this contract, the Disbursing Officer shall make disbursements of appropriations on a first-in, first-out basis, except that Appropriation ACR: AD shall be used only in connection with Exhibit Line Item ACC2."

This modification increases the total price of Contract NOOO14-69-C-0181 by \$30,326.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

CONTRACT NUMBER:

NOOO14-69-C-0181

CONTRACT EXHIBIT:

0001

CONTRACT LINE ITEM: DATE:

15 November 1970

### Item No. Supplies/Services

A001

The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Officer or his authorized representative within the scope of this contract, shall study the effects of exposure to radio frequency energy and ionized air on performance.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
AACOA	Status Reports Covering Subline Items 1AA through 1AJ	From 15 February 1969 Through 15 December 1970	\$38,120.00	AA and AB
A001AB	Status Report	15 February 1971	\$ 3,490.00	AB
A001AC	Status Report	15 April 1971	\$ 3,545.00	AC
A001AD	Status Report	15 June 1971	\$ 3,545.00	AC
A001AE	Status Report	15 August 1971	\$ 3,545.00	AC
A001AF	Status Report	15 October 1971	\$ 3,545.00	AC
A001AG	Status Report	15 December 1971	\$ 3,545.00	AC
A001AH	Final Report	Due Not Later Than 14 April 1972	\$ 3,547.00	AC

A002

The Contractor shall initiate and complete an analytical review of unique sensory systems which selected animals use in obtaining information about objects in their environments. The review is designed to provide information such as: what is the nature of the mechanism; does the system have potential useful application in development of a technique for classifying an object (man, mine, etc.) in the water or on the bottom; can the system be modeled; do we have all the necessary data for modeling; if not identify data requirements; what are possible limitations; and what improvements might make the system more useful in classifying objects in water.

In accordance with the provisions of Section D and E of the Schedule, the Contractor is required to submit the following reports:

	Type of Report	Due Date	Amount	ACR
AOO2AA AOO2AB AOO2AC	Status Report Status Report Status Report	31 January 1971 15 April 1971 30 June 1971	\$7,581.00 \$7,581.00 \$7,581.00	AD CA CA
ACCAD	Final Report	Due Not Later Than 31 October 1971	\$7,583.00	AD.

1_{bp} JAN 11 1971

Rendomline, Inc. Old York & Moreland Roads Willow Grove, Pennsylvania 19090

A. R. Zandle, Secretary-Treasurer

N00014-69-C-0181, P00004

## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

Jan. 5, 1971

Office of Naval Research Code 622 Arlington, Va 22217

> RE: Contract N00014-69-C-0181, P00004 ONR:622:DGR:sjw

Gentlemen

Enclosed are the three executed copies of the above cited contractual document.

Sincerely

A. R. Zandle

Secretary-Treasurer

AR Bandle



### DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH ARLINGTON, VIRGINIA 22217

ONR: 622: DGR: BJW

Rendomline, Inc. Old York and Moreland Roads Willow Grove, Pennsylvania 19090 Attention: A. R. Zandel

Subject:

Contract: N00014-69-C-0181, P00004

Gentlemen:

Four copies of the subject contractual document(s) are forwarded herewith. Three are for execution and one is for information and retention. If the terms and conditions thereof are acceptable to you, the three copies should be executed by you and returned to this Office, Attention: Gode 622. Upon receipt, this material will be executed on behalf of the Government and a fully executed copy returned to you.

The Contractor's name as used in executing the document should be identical to that shown on the contract. If, however, the title shown is incorrect, it is requested that it be corrected to show the name in which the contract is executed and that this Office be so advised in order that the other copies may be corrected accordingly.

Your prompt execution and return of three copies of this document will be appreciated.

Sincerely yours,

H. I. RAVITZ Contracting Officer

#### Encls:

 Four (4) copies of the subject document(s)

STANDARD FORM 30, JULY 1966 GENERAL SERVICES ADMINISTRATION	AMEN	DMENT	OF SOLIC	ITATIC	N/MODII	FICATIO	ON OF CONTRAC	PAGE 0
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CONTRACT DEL ER: NOCOE4-69-C-0181
MODIFIE FICH NUMBER: POO3

- 1. Effective as of the data of this conditionation, the General Provisions entitled "C(P) October 1969," pages 1 through 29, one homeny substituted for the General Provisions entitled "C(P) March 1967," pages 1 to ough 32, with "Alterations" thereto and all subsequent modifications thereto issued prior to this Modification Number POO3.
- 2. It is the intention of the parties bereto that all references in the Schedule issued under this contract to any clause or clauses of the contract shall be deemed to refer to the corresponding or like clause or clauses of the General Provisions autumbed hereto.
- 3. Further it is the desire of the Government and the Contra for that additional research on behavioral biophysics be performed. To a comparish this, there are hereby provided an increase in the total price and an extension in the period of performance of Contract NOCOlh-69-C-Ol81. In consideration of the foregoing, said contract, as modified, is neverly further modified as follows:
- (a) On the face page of the contract, in Blook Number 21, delete the figure "\$41,610.00," and substitute in lieu thereof the figure "\$62.882.00."
- (b) Effective as of the date of this modification, delete the first sentence of Section A of the Schedule in its entirety and substitute in lieu thereof the following:

"This Schedule is established under, and constitutes a part of, Contract NOCO14-69-G-0181, consisting of: face page; Schedule; and General Provisions pages 1 through 29, identified as 'G(P) - October 1969."

(c) Effective as of the date of this modification. Section B of the Schedule shall read as follows:

## "SECTION B - SPECIFICATION OF WORK

"Line Item No.	Supplies/Services Amount
1	The Contractor shall furnish the necessary personnel and facilities for and, in accordance with such instructions as may be issued by the Scientific Officer or his authorized representative within the scope of this contract, shall study the effects of exposure to radio frequency energy and conized air on performance.
	EAM TITLE: BEHAVIORAL BIOPHYSICS

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Line Item	Supplies/Services		Amount
	1AA - Reports through 15 August 1969		\$10,200.00
	1AB - Report of 15 October 1969		3,490.00
	1AC - Report of 15 December 1969		3,490.00
*.	1AD - Report of 15 February 1970		3,490.00
•	1AE - Report of 15 April 1970		3,490.00
	1AF - Report of 15 June 1970		3,490,00
	1AG - Report of 15 August 1970		3,490.00
•	1AH - Report - Due Not Later/Than 15 October 1970		3,490.00
	1AJ - Report - Due Not Later Than 15 December 1970		3.490.00
	lAK - Report - Due Not Later Than		
	15 February 1971		3,490.00
	I AL - Report- Due . Not Later Than		
	15 April 1971		3,545.00
	1AM - Report - Due Not Later Than		
	15 June 1971		3,545.00
	1AN - Report - Due Not Later Than		- 0 (
	15 August 1971		3,545.00
	1AP - Report - Due Not Later Than		
	15 October 1971		3,545.00
	1AQ - Report - Due Not Later Than		5 ele 55
	15 December 1971		3,545.00
	1AR - Final Report I Due Not Later Than		3 5 5 5 6 6
	11: April 1972	m om a T	3,547.00
		TOTAL	\$62,882.00

(d) Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

The above subline items are to be submitted in accordance with Sections E and F of the Schedule."

## "SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1972."

This modification increases the total price of Contract NOOOL4-69-C-0181 by \$21,272.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

#### (a) Definitions Used in this Clause.

- (1) <u>Subject Invention</u> means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.
- (2) Governmental purpose means the rights of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) <u>Contract</u> means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) <u>Subcontract and subcontractor</u> mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) Rights Granted to the Government. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

#### (c) Invention Disclosures and Reports.

- (1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United States, the Contractor shall furnish to the Contracting Officer:
- (i) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than six (6) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions (This Final Report and any Interim Report under (ii) above shall be submitted on DD Form 882 or other format acceptable to the Contracting Officer.);
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such invention made by or known to the Contractor or of any contemplated publication by the Contractor;

- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;
- (ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

#### (d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (ii) shall not proceed with the subcontract without the written authorization of the Contracting Officer.

The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.

(2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

#### (e) Domestic Filing of Patent Applications by Contractor.

(1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of

each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a patent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences, the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).

(2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

#### (f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
  - (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English translation of such application, and, convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, non-exclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

#### (g) Withholding of Payment.

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(2).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.

- (3) After payments total eight payment (POV) of the amount of this contract, and if no amount is required to be withhold under 12 above, the Contracting Officer may, if he deems such action warranted because of the Contractor performance under the Patent Hights clause of this contract or other known Government contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.
- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provisions of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
- (h) Contractor's Request for Greater Rights. The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit inswriting to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor tions, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

## (i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disand including the practice or material, (ii) in the use of any method, or (iii) in the performance position of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
- (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right to require the granting of a license to an applicant under any such Invention:
- (i) on a nonexclusive, royalty-free basis, unless the Contractor, his licensee, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues on such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should be retained for a further period of time; or
- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) Right to Disclose Subject Inventions. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) Forfeiture of Rights in Unreported Subject Inventions. The Contractor shall forfeit to the Covernment all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(1)(iii) of this clause,

whichever is later; provided, that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was due entirely to causes beyond his control and without his fault or negligence. The Contractor shall be deemed to hold any such forfeited Subject Invention, and the patent applications and patents pertaining thereto, in trust for the Government pending written assignment of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to unreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.

(1) <u>Examination of Records Relating to Inventions</u>. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.

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Randomline, Inc. Old York & Moreland Hoads Willow Grove, Pennsylvania 19090

A. R. Zendel

NOO014-69-0-0181, POO3

## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

August 14, 1970

Mr. L. O. Lincoln Office of Naval Research (622) Arlington, Va. 22217

Dear Mr. Lincoln:

Enclosed are the executed copies of contract N00014-69-C-0181 P003.

Sincerely,

ER Randel

A. R. Zardel

ARZ/bf



# DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON PROPERTY Arlington, Virginia 22217

in herly befer to ONR:622:DGR:

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AUG 1 2 1070

Randomline, Inc. Old York and Moreland Roads Willow Grove, Pennsylvania 19090

Attention: A. R. Zandel

Subject:

Contract

N00014-69-0-0181 P003

Gentlemen:

Four copies of the subject contractual document(s) are forwarded herewith. Three are for execution and one is for information and retention. If the terms and conditions thereof are acceptable to you, the three copies should be executed by you and returned to this Office, Attention: Gode 622. Upon receipt, this material will be executed on behalf of the Government and a fully executed copy returned to you.

The Centractor's name as used in executing the document should be identical to that shown on the contract. If, however, the title shown is incorrect, it is requested that it be corrected to show the name in which the contract is executed and that this Office be so advised in order that the other copies may be corrected accordingly.

Your prompt execution and return of three copies of this document will be appreciated.

Sincerely yours,

Encls:

 Four (4) copies of the subject document(s) L. O. LINCOLN

## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

February 13, 1970

Mr. C. W. Hartley (code 622) Office of Naval Research Washington, D.C. 20360

Dear Mr. Hartley:

Enclosed are the two executed copies of amendment P002 of contract N00014-69-C-0181.

Sincerely,

Jane Gelman Specialist

enc. jg

STANDARD FORM 30, JULY 1966 GENERAL SERVICES ADMINISTRATION FED. PROC. REC. (4) CFR) 1-16-101	LENT	OF SOLICITA	ATION/MODIF	ICATI	.1 OF CONTRACT	PAGE OF
1. AMENDMENT/MODIFICATION NO.	2. EFFECTIVE	i .	SITION/PURCHASE REQUI		Code PROJECT NO. (14 appl	içable)
P002	70 Feb		14-246(42)12-			
5. ISSUED BY CODE	0001 <i>L</i>		• • • • • • • • • • • • • • • • • • • •		co ntract Administr	ne 39
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Department of the Navy	$\alpha_{\Omega_{\Omega_{\Omega}}}$	Co. P. C	D. Box 7478		_	
Washington, D. C. 20360	RECT	Phi	ladelphia, Pe	ennsyl	vania 19101	
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and ZIP Willow Grove, Per		nia 19190			CONTRACT/ORDER 14-69-C	-01 81
[Code)			1		69 Feb. 15	
<u> </u>					DATED	(See block !i)
9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF	SOLICITATIO	NS (N. A.)				
The above numbered solicitation is amended as so			and date specified for rec		نسسا البسا	not extended.
Offerors must acknowledge receipt of this amendment p						B., l
(a) By signing and returning copies of this telegrom which includes a reference to the solicitation TO THE HOUR AND DATE SPECIFIED MAY RESULT	and amendmen	t numbers. FAILURI	FOF YOUR ACKNOWLE	DEMENT	copy of the offer submitted; or (c) TO BE RECEIVED AT THE ISSU	JING OFFICE PRIOR
change may be made by telegrom or letter, provided su date specified.	ch telegram o	letter makes refere	ince to the solicitation	and this am	endment, and is received prior to	the opening hour and
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(a) This Change Order is issued pursuant to		<del>-, ,</del>				<del>*</del>
The Changes set forth in block 12 are made to	the above num	bered contract/order	•		and the second	
(b) The above numbered contract/order is modified	l tareflect the	administrative chang	ges (such as changes in p . C. 2304 (a) (11	saying effic )	e, appropriation data, etc.) set to	rin in block (2.
(c) X This Supplemental Agreement is entered into p	ursvant to out? Farth in black	iority at		·		<del></del>
12. DESCRIPTION OF AMENDMENT/MODIFICATION		<del> </del>		<del></del>		
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Except as provided herein, all terms and conditions of the d	ocument refere	nced in block 8, as i	neretafore changed, remai	n unchange	d and in full force and effect.	······································
CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT	CONTRAC	FOR/OFFEROR IS RE	QUIRED TO SIGN THIS C	, <u>.</u>		ES TO ISSUING OFFICE
14. NAME OF CONTRACTOR/OFFEROR				UF AMER		
BY (Signature of person authorized	te sign)	<del></del>	BY	, <u>-</u>	(Signature of Contracting Officer)	
15. NAME AND TITLE OF SIGNER (Type or print)		. DATE SIGNED	18. NAME OF CONTE		OFFICER (Type or print)	19. DATE SIGNED
						ţ

NOOO14-69-C-0181 CONTRACT NUMBER: MODIFICATION NO.: P002

1. Effective as of the date of this Modification, add the following new Section to the Schedule:

# "SECTION G - GOVERNMENT-FURNISHED PROPERTY

. . .

"The Government will furnish to the Contractor as Government-Furnished -Property for use under this contract, the following: Cost

Description Item No. 1

Data Analysis System consisting of the following listed items incorporated into system:

USN-1-0341 Camera Polaroid, Model 104 USN-6-0341 Computer of Average Transients, Model 1000 USN-7-0341 Transducer Stratham USN-10-0341 Senior Voitohmyst USN-13-0341 Audio Generator, RCA Model WA-44-C USN-17-0341 Electrometer, Keithly 610A USN-20-0341 Power Supply, P-S-12/24 USN-25-0341 Culmotive Recorder, Gerbrand USN-33-0341 Scope Camera, Tektronix C-12 USN-36-0341 Stop Watch USN=49-0341 Camera USN-53-0341 Dynograph, Beckman Model 541, S/N 297 USN-54-0341 Biological Amplifier, USM-55-0311 Recorder, Esterline-Model DS2C Angus, Model A620A USM-56-0341 Dictating Machine, IBM, S/N 513583 USM-57-0341 Oscilloscope, Tektronix Model 565 with (1) 2A61 and (1) 2A63 Amplifier USN-63-0341 Screen Room

## Item No.

## Description

<u>Cost</u>

2

Specimen Set-up System consisting of the following items incorporated into system:

USN-3-03hl Pressure Cooker USN-4-0341 Respiration Regulator USN-5-0341 Pipette Puller, KOPF USN-11-0341 Lerygnscope USN=12-0341 Blood Pressure Gauge USN-22-0341 Motor, Part of Rat Box, Newark CMO USN-30-0341 1/2" Electric Drill, W/Stand, Craftsman USN-31-0341 Bovine Electocautery USN-32-0341 Stereotoxic Instrument, KOPF 120h USN-34-0341 Ministrue Micromanipulator, Model MM-3 USN-35-0341 Balance Scale, Ohaus, Model 3502 USN-38-0341 Microscope, B & L Model 313353-USN-39-0341 Pump, Cole Parameter, 7064-5 USN=42=0341 Cat Skeleton USN-43=0341 Vaporizer USN-44-0347 Electrical Drill, Osteological USN-45-0341 Ear Bars, (Part of USN-32-0341) USN-46-0341 Regulator, 306-0071-800 USN-48-0341 Bright Spot Headlight USN-58-0341 Transducer, Grass FT-03B USN-60-0941 Balance Scale, SEKO, Model 1137 USN-61-0341 Laboratory Oven, LaPine 317-85

CONTRACT NUMBER: MODIFICATION NO.:

NOOO1 4-69-C-01 81 POO2

Item No.

## Description

Cost

3

Behavioral Assay System consisting of the following items incorporated into system:

USN-8-0341 Program Timer TM-15K391 USN-9-0341 L Band Oscillator Applied Microwave USN-14-0341 Laboratory Simulator AEL Model 104A USN-15-0341 Photic Simulator, AEL Model 127 USN-16-0341 Stimlus Isolator, AEL Model 112 N. . USN-18-0341 Power Oscillator, Microdot 417A USN-19-03L1 Coax To Waveguide Adapter, Scientific Atlanta USN-21-0341 Lo Power Terminator, Microlab TA5MB USN-23-0341 Coax Attentuator, Empore AT50-10 USN-24-0347 Coax Attentuator, Empire AT50-40 USN-26-0341 Lo-Pass Filter, H/P Model 360A USN-27-0341 Thermistor Mount, H/P Model 477B USN-29-0341 Bench Saw W/Motor Craftsman USN-37-0341 Programmer, Fohringer 1182M1 USN-41-0341 40 Drawer Parts Cabinet USN-51-0341 Programmer, Forhinger USN-52-0341 Programmer, Forhinger USN-59-0341 Pellet Dispenser, Forhinger USN-62-03L1 Horn Antenna, Model 71-1-1



### DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON, D. C. 20360

IN REPLY REFER TO ONR:622:mj FEB 0 5 1970

Randomline, Inc. York & Moreland Roads Willow Grove, Pennsylvania 19090

Attention: Allan H. Frey

Subject:

Contract

NOOO14-69-C-0181 POO2

Gentlemen:

Three(3) copies of the subject contractual document are forwarded herewith. These documents have been executed on behalf of the Government. If the terms and conditions are acceptable to you, please execute all three (3) copies and return two (2) copies to this office, Attention: Code 622.

Your prompt execution and return of the enclosed documents to this office will be appreciated.

> Sincerely yours, C. W. HARTLEY Contracting Officer

Encls:

1. Three (3) copies each of the following documents:

RANDOM LINE INC IN SYSTEM el get out a sour m Mod. Poo2 to 69-C-0181 Send apy to DCRP-CMC"

Thomas, J. Luglio

at DCARR Warry NAVSO 5216/5 (REV. 11-57) S/N-0104-904-1762 (REV. 11-67) DEPARTMENT OF THE NAV

# !emorandum

DATE: 12 January 1970

ONR Code 616K- L. Duncker FROM:

: ONR Code 626A - N. Moreland

subj : Transfer of property from old Contract NOCO14-66-C-0341 with HRB-SINGER, INC. to Contract NOO014-69-C-0181 with Randomline, Inc.

- Attached hereto is copy of a PR with letter from Randomline and a list of the property requested.
- Please advise if the property is available for transfer to the Randomline contract and will you effect the transfer when the modification has been processed and executed.

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Old York & Moreland Rose Willow Grove, Pennsylvan	GRANT		ACCELERATION	I		
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5. PRINCIPAL INVESTIGATOR	·				NO-FUNDS EXTENSION	
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. BASIS FOR CONTRACTOR SELECTION (New procurement only)		8. EXPENDITURE RATE			REOPENED	
UNSOLICITED PROPOSAL	b. Amount	to. PERIOD TO BE	COVE	DED BY THE PROPERTY	NT	
SOLE SOURCE SOLICITATION			FROM 15 1	ob 7	70 _{To} 14 Feb 7	/1

To perform research sized at discovering and predicting the effects of air ions and centimeter electromagnetic energy upon the nervous system and on behavior. The purpose of this FR is to permit the contractor to acquire three special equipment systems developed under a previous contract by the present principal investigator. This will permit the work to include studies of elfaction functioning and related neural-electric responses.

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## RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

December 3, 1969

Physiological Psychology Program Office of Naval Research (454) Washington, D. C.

Dear Sir:

We wish to request that contract NOO014-69-C-0181-PO01 be amended to provide Randomline. Inc with the three special systems detailed on the attached.

As we stated in our proposal, we would expand the scope of the work into the area of electrical gradient phenomena at no additional cost if these unique systems were provided to us. In as much as the Scientific Officer can now provide the systems and wishes us to expand the scope of the work as soon as the contract can be amended, we are submitting this request.

Beside the experimentation with crustaceans and cardiac response to rf energy to which we are now contractually committed, we will expand the scope of the work to do in addition a study on electrical gradient manipulation and effect on the olfactory mucosa response if these systems are provided. We will evaluate the gradient effect on the EOS and higher neural interactions.

This additional work has considerable significance to the Navy and direct application to certain problems in submarines as well as other applications. It is expected that the data that would result would have bearing on long term habitability aboard ships and lead to means to increase personnel effectiveness.

Randomline will not profit from the provision of these unique systems. These systems were specially developed and assembled for the Navy at considerable cost to the government and can only be used in this particular application. They can not be used for general purposes in system form. Neither can the individual components be used since they were radically modified in integrating them into the systems and they can not be returned to their original state.

In as much as HRB-Singer used the systems locally (the HRB project director who is now employed by us used them in the adjacent township), we can take on accountability for the systems without incurring shipping costs against ourselves or the government.

# RB Contract 700014-66-0-034/

inus, it would be provided the unique system so that we can expand th which the systems were a

.o best interest of the Government to expeditiously eveloped at considerable cost to the government, ope of the work by adding the additional task for med. This is a task whose results will have wide application and be of constrable significance to the Navy.

Sincerely,

Allan H. Frey

allan Fre

AHF/bf

#### Systems

The system components listed are not in the condition as purchased sev years ago. Most of them lack parts that were discarded in the building of systems, have extensive wiring and subcomponent changes for which there are no schematics, require auxillary equipment to operate due the changes made in them (said auxillary equipment and specifications are not included) or have mechanical changes that limit their function. There are no instruction books available on these special purpose systems to provide information on switch sequencing, allowable or necessary voltages, application, etc.

Data Analysis System consisting of the following listed items of Government Furnished Property incorporated into system:

> USN-1-0341 Camera Polaroid, Model 104 USN-6-0341 Computer of Average Transients, Model 1000 USN-7-0341 Tranducer, Stratham USN-10-0341 Senior - Lotanyst USN-13-0341 Audio Generator, RCA Model WA-44-C USN-17-0341 Electrometer, Keithly 610A USN-20-0341 Power Supply, P-S-12/24 USN-25-0341 Culmotive Recorder, Gerbrand . USN-33-0341 Scope Camera, Teltronix C-12 USN-36-0341 Stop Watch USN-49-0341 Camera USN-53-0341 Dynograph, Beckman Model 542, S/N 297 USN-54-0341 Biological Amplifier, Model DS2C USN-55-0341 Recorder, Esterline-Angus, Model A620% USN-56-0341 Dictating Machine, IBM, S/N 513583 USN-57-0341 Oscilloscope, Tektronix Model 565 with (1) 2A61 and (1) 2A63 Amplifier USN-63-0341 Screen Room

USN-5-0341 Pipette Puller, KOPF USN-11-0341 Larygascope USN-12-0341 Blood Pressure Gauge USN-22-0341 Motor, Part of Rat Box, Newark CMO USN-30-0341 1/2" Electric Drill, W/Stand, Craftsman USN-31-0341 Bovine Electocautéry USN-32-0341 Stereotoxic Instrument, KOPF 1204 USN-34-0341 Hinistrue Micromadipula Model MM-3 USN-35-0341 Balance Scale, Ohaus, Model 3502 USN-38-0341 Microscope, B & L'Model 313353 USN-39-0341 Pump, Cole Parameter, 7064-5 USN-42-0341 Cat Skeleton USN-43-0341 Vaporizer USN-44-0341 Electrical Drill, Osteological USN-45-0341 Ear Bars, (Part of USN-32-0341) USN-46-0341 Regulator, 306-0071-800 USN-48-0341 Bright Spot Headlight USN-58-0341 Transducer, Grass FT-03 USN-60-0341 Balance Scale, SERO, Model 1137 USN-61-0341 Laboratory Oven. LaPine 317-85

3 Behavioral Assay System consisting of the following items of Government Purnished Property incorporated into system:

Specimen Set-up System consisting of the following items of Government Furnished Property incorporated into system:

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USN-8-0341 Program Timer, ጥህ፡፡- ፤ ፍክናዊውን

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   -15-0341 Photic
  Model 127
_2N-16-0341 Stimlu:
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AEL Model 112
USN-18-0341 Power
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Microdot 411A
USN-19-0341 Coax To
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Adaptor, Scientific . . . . . . . . .
USN-21-0341 Lo Power lirminator,
Microlab TASME
USN-23-0341 Coax Attenuator,
Empore AT50-10
USN-24-0341 Coax Attenuator,
Empire AT50-40
USN-26-0341 Lo-Pass Filter,
H/P Model 360A
USN-27-0341 Themaistor Mount,
H/P Model 477B
USN-29-0341 Bench Saw W/Motor
Craftsman
USN-37-0341 Programmer, Fohringer
1182Ml
USN-41-0341 40 Drawer Parts Cabinet
USN-51-0341 Programmer,
Forhinger
USN-52-0341 Progresser,
Forhinger
USN-59-0341 Pellet Dispenser,
Forhinger
USN-62-0341 Horn Antenna,
Model 11-1-1
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TANDARD FORM 30, JULY 19 GENERAL SERVICES ADMINISTRA FED. PROC. REG. (41 CFR) 1-	TION F	AMENDM.				N/MODIFIC		)F CONTRACT	lioshl-1	PAGE   OF
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Washington, D. C. 203	360			Phil	adel	phia, Pen	nsylv	ania 19101		
7. CONTRACTOR NAME AND ADDRESS	CODE	709653	F	ACILITY C	ODE	1955 39_	8.	MENDMENT OF		
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ode) Glensi	de, Pen	m <i>s</i> ylvania	19038				<u></u> ,	l0		··
							t	ATED 69 Feb. 1	<u>5</u> (s.	e block II)
9. THIS BLOCK APPLIES ONLY	TO AMENDM	ENTS OF SOLICI	TATIONS (N.	A.)			<u>'</u>			
The above numbered sali					and date	specified for recei	pt of Offer	s is extended, is	not axt	iended.
Offerers must acknowledge rec	eipt of this on	nendment prior to t	he hour and date	e specified i	in the so	olicitation, or as an	nendeđ, by	one of the following mathods:		
(a) By signing and returning telegram which includes a refe TO THE HOUR AND DATE SI change may be made by telegram	rence to the s	ples of this amendant officiation and ame	ment; (b) By act	knowledging s. FAILURI	receipt E OF YO	of this amendment OUR ACKNOWLED	on each co GMENT T	opy of the offer submitted; or (c O BE RECEIVED AT THE ISS you desire to change an offer a	Iready :	submitted, such
date specified.	DBJ. CLASS C	BUREAU S	LOT. ACCT		RANS.	PROPERTY ACCTG, ACT.	COUNTRY	COST CODE	$\Box$	THUOMA
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(c) X This Supplemental As It modifies the above 12. DESCRIPTION OF AMENDME	in block 12 a contract/order reement is ent numbered cont NT/MODIFICA	ire made to the abo is modified to refle tered into pursuant tract as set forth in	ect the administ to authority of a block 12.	10 U.S	ges (suc	2304 (a) (11		, appropriation data, etc.) set t		<u> </u>
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Except as provided herein, all term	s and conditio	ons of the documen	referenced in	block 8, as	heret <u>af</u> a	re changed, remain	unchange	d and in full force and effect.		
13. CONTRACTOR/OFFEROR	TON 21								PIES T	O ISSUING OFFICE
14, NAME OF CONTRACTOR/OF					17. (	INITED STATES	OF AMERI	CA		
ВҮ			<u> </u>	<u>-</u>	BY _					
(S ₁ )		n authorized to sign)			<del></del>			Signature of Contracting Officer)	Т	19. DATE SIGNED
15. NAME AND TITLE OF SIGN	ER (Typo or p	rint)	16. DATE	SIGNED	18. 1	NAME OF CONTRA	ACTING O	FFICER (Type or print)	ĺ	13. UNITE SIGNED

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CONTRACT NUMBER: JOO14-69-C-0181 MODIFICATION NO.: POO1

1. On the face page of the contract, in Block Number 21, delete the figure "\$20,680.00," and substitute in lieu thereof the figure "\$41,610.00."

2. Under Section B of the Schedule, delete Line Items No. 1AA through 1AF in their entirety and substitute in lieu thereof the following:

"1AA - See Section F - through 15 August 1969  1AB - See Section F - 15 October 1969  1AC - See Section F - 15 December 1969  1AD - See Section F - 15 February 1970  1AE - See Section F - 15 April 1970  1AF - See Section F - 15 June 1970  1AG - See Section F - 15 August 1970  1AH - See Section F - 15 October 1970	\$10,200.00 3,490.00 3,490.00 3,490.00 3,490.00 3,490.00 3,490.00
1AT - See Section F - 15 December 1970	3,490.00
1AJ - See Section F - Upon completion of work and submission of final report	3,490.00
TOTAL	#41,610.00."

3. Delete Section C of the Schedule in its entirety and substitute in lieu thereof the following:

## "SECTION C - PERIOD OF PERFORMANCE

"The performance of work hereunder shall commence on 15 February 1969, and shall be completed on  $1\mu$  February 1971."

4. Effective as of the date of this Modification, clause 42 of the contract, entitled "Patent Rights," shall read as follows:

#### "L2. PATENT RIGHTS

"The following provisions shall apply to the work to be performed under this contract:

CONTRACT NUMBER: NOOO!4-69-C-0181 MODIFICATION NO.: POO1

#### (a) Definitions Used in this Clause.

(1) <u>Subject Invention</u> means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.

- (2) <u>Governmental purpose</u> means the rights of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) Contract means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) <u>Subcontract and subcontractor</u> mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) <u>Rights Granted to the Government</u>. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

#### (c) Invention Disclosures and Reports.

- (1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United States, the Contractor shall furnish to the Contracting Officer:
- (i) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than six (6) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions (This Final Report and any Interim Report under (ii) above shall be submitted on DD Form 882 or other format acceptable to the Contracting Officer.);
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor;

- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;
- (ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

#### (d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (i1) shall not proceed with the subcontract without the written authorization of the Contracting Officer.

The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.

(2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

## (e) Domestic Filing of Patent Applications by Contractor.

(1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of

CONTRACT NUMBER: NOOO14-69-C-0181 MODIFICATION NO.: POO1

each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a patent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences, the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).

(2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

## (f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
  - (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English translation of such application, and, convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, non-exclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

#### (g) Withholding of Payment.

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(2).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.

- (3) After payments total eighty percent (80%) of the amount of this contract, and if no amount is required to be withheld under (2) above, the Contracting Officer may, if he deems such action warranted because of the Contractor's performance under the Patent Rights clause of this contract or other known Covernment contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.
- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withhelding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provisions of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
- (h) <u>Contractor's Request for Greater Rights.</u> The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit in writing to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point information concerning the Contractor's intention and plan to bring the Contractor's request for of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

## (i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
- (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right to require the granting of a license to an applicant under any such Invention:
- (i) on a nonexclusive, royalty-free basis, unless the Contractor, his licensee, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues on such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should be retained for a further period of time; or
- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) <u>Right to Disclose Subject Inventions</u>. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) Forfeiture of Rights in Unreported Subject Inventions. The Contractor shall forfeit to the Government all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(1)(iii) of this clause,

CONTRACT NUMBER: MODIFICATION NO.:

N00014-69-C-0181

whichever is later; provided, that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was the time specified in (i) or (ii) above, or (b) he establishes that the failure to report was the entirely to causes beyond his control and without his fault or negligence. The Contractor due entirely to causes beyond his control and without his fault or negligence. The Contractor and the patent applications and shall be deemed to hold any such forfeited Subject Invention, and the patent applications and the patent applications and the region of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to unreported shall not supersede any other rights which the Government may have in relation to unreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.

- (1) Examination of Records Relating to Inventions. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.
- 5. Effective as of the date of this Modification, the "ALTERATIONS IN CONTRACT (For C(P) March 1967) of October 1968 and June 1969," which are attached hereto, are hereby substituted for the "ALTERATIONS IN CONTRACT (For C(P) March 1967) of October 1968," which are attached to the General Provisions.

This Modification increases the total price of Contract NOOO14-69-C-0181 by \$20,930.00, which increase is chargeable against the Appropriation set forth on Page 1, hereof.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

The following Alterations are hereby made in the General Provisions of this contract:

## 1. MODIFICATIONS

- (a) In clause 6, entitled "Government Property," make the following changes:
- (i) In paragraph (c), in the sixth line, delete the first word "of," and substitute in lieu thereof the "or."
- (ii) Delete paragraph (d) in its entirety and substitute in lieu thereof the following:
- "(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the 'Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors' (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract."
- (iii) Delete paragraph (g) in its entirety and substitute in lieu thereof the following:

## "(g) Risk of Loss.

- (1) Except for loss, destruction or damage resulting from a failure of the Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the maintenance, repair, protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:
- (i) caused by any peril while the property is in transit off the Contractor's premises; or
- (ii) caused by any of the following perils while the propert; is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils --
- (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandalism and malicious

ALTERATIONS IN CONTRACT (For C(P) - March 1967) October 1968

- any Government property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organiza-Contracting Officer thereof, and shall communicate with the Loss and Salvage Organiza-Contracting Officer, and with the tion, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged steps to protect the Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
  - (i) the lost, destroyed, and damaged Government property;
  - (ii) the time and origin of the loss, destruction, or damage;
- (iii) all known interests in commingled property of which the Government property is a part; and
- (iv) the insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed any of such charges the payment of which the Government has, at its option, assumed directly), in accordance with the procedures provided for in the 'Changes' clause of this contract.

- destruction of or damage to Government property, and subject to such conditions and limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like, sell for the account of the Government any item of Government business or the like, sell for the account practicable repair, or which is so commingled property which has been damaged beyond practicable repair, that separation is impracticable.
- (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foregoing provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions tion, or the utilization of the Government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other loss or destruction of or damage to the Government property, and such property (other loss or destruction of or damage to be sold) shall be returned to the Government in as good than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) June 1969

## 2. DELETIONS AND SUBSTITUTIONS

(a) Clause 12, entitled "Equal Opportunity," is hereby deleted in its entirety and the following substituted in lieu thereof:

## "12. EQUAL OPPORTUNITY

"During the performance of this contract, the Contractor agrees as follows:

- applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
  - (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
  - (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

1bp OCT 8 1969

Randomline, Inc. Old York & Moreland Roads Willow Grove, Pennsylvania 19090

A. R. Zandle

N00014-69-C-0181, P001

### RANDOMLINE, INC.

Old York & Moreland Roads Willow Grove, Penna. 19090

(215) OL 9-6228

September 26, 1969

Office of Naval Research (code 622) Washington, D. C. 20360

/HE: contract NOO014-69-C-0181-P001 ONR: 622: DGR: lbp

Gentlemen:

The terms and conditions of the referenced contract are acceptable to us. Enclosed are the three copies that we have executed.

Sincerely,

Q. R. Zandley

A. R. Zandle

ARZ/bf

Enclosure:



#### DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON, D. C. 20360

ONR: 622: DGR: 1bp SEP 1 8 1969

Randomline, Inc. Glenside Avenue and Limekiln Pike Glenside, Pennsylvania 19038

Attn: A. R. Zandle

Subject:

Contract

NOO014-69-0-0181, POO1

#### Gentlemen:

Four copies of the subject contractual document(s) are forwarded herewith. Three are for execution and one is for information and retention. If the terms and conditions thereof are acceptable to you, the three copies should be executed by you and returned to this Office, Attention: Code 622. Upon receipt, this material will be executed on behalf of the Government and a fully executed copy returned to you.

The Contractor's name as used in executing the document should be identical to that shown on the contract. If, however, the title shown is incorrect, it is requested that it be corrected to show the name in which the contract is executed and that this Office be so advised in order that the other copies may be corrected accordingly.

Your prompt execution and return of three copies of this document will be appreciated.

Sincerely yours, C. W. HARTLEY Contracting Officer

#### Encls:

1. Four (4) copies of the subject document(s)



#### DEFENSE SUPPLY AGENCY

DEFENSE CONTRACT ADMINISTRATION SERVICES REGION, PHILADELPHIA POST OFFICE BOX 7478

19101 PHILADELPHIA, PENNSYLVANIA

> Miss Koch/ec/3572 16 July 1969

SUBJECT:

Randomline, Inc.

Contract No: N00014-69-C-0181

TO:

Procuring Contracting Officer

Office of Naval Research

Navy Department

ATTN: Mr. Lathanu/PCO Washington, D.C. 20360

1. Attached find letter dated 1 July 1969 from Randomline, Inc., which is forwarded for your information, review and appropriate action.

2. In order that correspondence may be routed properly, it is recommended that a modification be issued changing the contractor's address to Old York & Moreland Roads, Willow Grove, Pennsylvania 19090.

1 Encl

WILLIAM P. LEHMAN

Administrative Contracting Officer



#### DEFENSE SUPPLY AGENCY

DEFENSE CONTRACT ADMINISTRATION SERVICES REGION, PHILADELPHIA
POST OFFICE BOX 7478
PHILADELPHIA, PENNSYLVANIA 19101

Miss Koch/ec/3572 16 July 1969

SUBJECT: Randomline, Inc.

Contract No: N00014-69-C-0181

TO:

Procuring Contracting Officer

Office of Naval Research

Navy Department

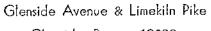
ATTN: Mr. Lethanu/PCO Washington, D.C. 20360

- 1. Attached find letter dated 1 July 1969 from Randomline, Inc., which is forwarded for your information, review and appropriate action.
- 2. In order that correspondence may be routed properly, it is recommended that a modification be issued changing the contractor's address to Old York & Moreland Roads, Willow Grove, Pennsylvania 19090.

1 Encl

WILLIAM P. LEHMAN Administrative Contracting Officer

## RANDOMLINE, INC.



Glenside, Penna. 19038

(215) TU 7-3121

July 1, 1969

Mr. N. P. Dordick DCASR P. O. Box 7478 Philadelphia, Pa. 19101

RE: Contract N00014-69-C-0181

Dear Mr. Dordick:

Please note in your records that next week we shall take possession of a building that will house our offices and laboratory. The address is:

Randomline, Inc. Old York & Moreland Roads Willow Grove, Penna., 19090

Sincerely,

a. R. Sandle

A. R. Zandle

ARZ/bf



#### DEFENSE SUPPLY AGENCY

DEFENSE CONTRACT ADMINISTRATION SERVICES REGION, PHILADELPHIA POST OFFICE BOX 7478 PHILADELPHIA, PENNSYLVANIA 19101



IN REPLY REFER TO DCRP . COK+C 8 April 1969

Randomline, Inc. Glenside Avenus & Limekila Pike Glenside, Pa. 19038

Gentlemen:

N00014-69-Chas been assigned to this Office for Administration. Personnel representing this Office who have been designated functional responsibilities in administering this contract are:

		name	TELEPHONE EXTENSION
Administrative Contracting Officer Industrial Specialist Quality Assurance Representative Property Administrator Preservation-Packing Specialist Transportation Officer Value Engineering Monitor	(ACO)		271-3572 672-4300-est.83 672-4300-est.86

Any questions concerning the terms of your contract or any action which could lead to the possibility of modifying these terms should be referred to the ACO who will be your principal point of contract. Other officials listed above may be contacted directly on routine functional matters.

It is suggested that you carefully review your contract and if there is any problem area which you feel may affect your performance, it is requested that you immediately advise the ACO.

To facilitate communications, it is suggested that you inform the ACO of the names of your authorized representatives in the administration of this contract.

contr. ego file Sco-Procuring Contract.Off. Office of Naval Research Mavy Dopt. Wash. D.C.

20360

Sincerely yours,

Ch, Waspans/Systems Branch

Operations Div, CA

DCRP-FL-C-122 Oct 68

DCRP-COK-C

14 April 1969

Randomline, Inc. Glenside Avenue & Limekiln Pike Glenside, Pa. 19038

Attn: Dr. A. Frey

Gentlemen:

This will confirm telephone conversation on 14 April 1969. We are desirous of holding Post - Award Orientation Conferences on Contract

The proposed date is Wednesday, 16 April 1969, with conference commencing at 10:00 A.M. The meeting will be held at your Facility.

It is requested that you have appropriate technical and administrative personnel in attendance to achieve proper coordination with repre-

The attached DD Form 1484 (Post Award Conference Record) will serve as a tentative agenda of areas of interest to be discussed. purpose of the meeting is to insure that a complete understanding is reached on all pertinent items to the end that the product is delivered on schedule meeting acceptance criteria.

Adequate time for questions and discussion of problem areas will be avail-

I Encl

Administrative Contracting Officer

Cpy furnished; C.O., Office of Naval Research, Navy Dept., Attn: R. Lachance,

B. Cuip, Rorth Branch, MCASE, Willow Grove Air Reserve Pacility, Willow Grove, Pe. 19090

#### RECORD COPY

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CONTRACT NUMBER: N00014-69-C-0181

#### SCHEDULE

## SECTION A - BASIC CONTRACT IDENTIFICATION

This Schedule is established under, and constitutes a part of, Contract N00014-69-C-0181, consisting of: face page; Schedule; and General Provisions pages 1 through 32, identified as "C(P) - March 1967," with "Alterations" thereto. In the event of any inconsistency in this contract, the inconsistency shall be resolved by giving precedence in the following order: (a) the Schedule; (b) the General Provisions; (c) the other provisions of the contract whether incorporated by reference or otherwise; and (d) the Specifications.

### SECTION B - SPECIFICATION OF WORK

Line Item No.	Supplies/Services	Amount
1	The Contractor shall furnish the necessary personnel and facilities for and, in accordance with any instructions issued by the Scientific Officer or his authorized representative, shall study the effects of exposure to radio frequency energy and ionized air on performance.	(FIXED PRIÇE)
	EAM TITLE: BEHAVIORAL BIOPHYSICS  1AA - See Section E - 15 April 1969  1AB - See Section E - 15 June 1969  1AC - See Section E - 15 August 1969  1AD - See Section E - 15 October 1969  1AE - See Section E - 15 December 1969  1AF - See Section E - Upon completion of work	\$ 3,400.00 3,400.00 3,400.00 3,400.00 3,400.00 3,680.00
	Total Amount of Contract	\$20,680.00

2 Reports - See Section F

(Not Separately Priced)

### SECTION C - PERIOD OF PERFORMANCE

The performance of work hereunder shall commence on 15 February 1969, and shall be completed on 14 February 1970.

## SECTION D - SCIENTIFIC OFFICER

The Scientific Officer under this contract is the Head, Physiological Psychology Branch, Psychological Sciences Division, Office of Naval Research, Department of the Navy, Washington, D. C. 20360.

CONTRACT NUMBER: NOO014-69-C-0181

#### SCHEDULE

## SECTION E - PRICE AND PAYMENTS

- (1) Except to the extent otherwise provided herein, the Government shall pay to the Contractor as full compensation for the performance of work hereunder, the total price specified in Item 21 on Page 1, hereof. Upon receipt of properly certified invoices, and a certification by the Contract Administrator that status (progress) reports have been submitted in accordance with Section F, hereof, payments shall be made, notwithstanding any provisions of clause 2 of the contract to the contrary, as specified herein; standing any provisions of clause 2 of the contract to the contrary, as specified herein; provided, however, that the final payment shall not be made until the Scientific Officer has received the final report from the Contractor and has certified receipt and acceptance thereof to the Contract Administrator.
- (2) The total contract price specified in this contract is based upon the understanding that the Contractor shall conduct the specified research program substantially in accordance with the proposal upon which this contract is based. In the event that the performance of work under this contract is not substantially in accordance with the underlying proposal, it is understood and agreed that the parties hereto shall negotiate an appropriate reduction in the contract price or an extension in the period of performance of this contract.

#### SECTION F - REPORTS

- (1) The Contractor shall submit not more than fifty (50) copies of status (progress) reports on the dates specified herein, and not more than one hundred (100) copies of a final technical report making full disclosures of all research conducted under this contract. The final technical report shall be distributed in accordance with a list approved and furnished to the Contractor by the Scientific Officer. With the approval of the Scientific Officer, reprints of published articles may be distributed as technical reports. In all technical reports (including reprints) submitted hereunder, there shall be affixed a face page which shall contain a statement that "reproduction in whole or in part is permitted for any purpose of the United States Government," and a statement that the research was sponsored by the Office of Naval Research, including the ONR Contract Number and the ONR Contract Authority identification number (NR., Reqn., etc.). Where reports based upon research performed under this contract are published in scientific and technical journals or where news releases are issued with regard to the work performed under this contract, there shall be included in such publications and news releases an appropriate statement acknowledging that the research being reported was accomplished with the support of the Office of Naval Research.
- (2) The Contractor shall include a completed "Document Control Data R&D" form (DD Form 1473) as the last page of each copy of every scientific and technical report prepared under this contract. The form contains instructions for preparation. The cognizant Government Contract Administrator will provide assistance to the Contractor in obtaining the required forms. Administrative type reports, managerial (status) reports, and reprints submitted as technical reports are excluded from this requirement.

CONTRACT NUMBER: N00014-69-C-0181

#### SCHEDULE

(3) Unless otherwise authorized in writing by the Contracting Officer, reports submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 single page reports or a total of 25,000 pages of a multiple-page report. To satisfy the requirements of the Defense Documentation Center, at least one copy of each technical report submitted to the Defense Documentation Center must be black typing or reproduction of black on white paper or suitable for reproduction by photographic techniques. Reprints of published technical articles are not within the scope of this paragraph (3).

CONTRACT NUMBER: Nou014-69-C-0181

### PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (1)

### (a) Definitions Used in This Clause.

- (1) Subject Invention means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term "Subject Invention" includes, but is not limited to, any art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.
- (2) Governmental purpose means the right of the Government of the United States (including any agency thereof, state or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) any Subject Invention throughout the world by or on behalf of the Government of the United States.
- (3) Contract means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.
- (4) <u>Subcontract and subcontractor</u> mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.
- (5) To bring to the point of practical application means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine or system and, in each case, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (b) Rights Granted to the Government. Except as provided in (e) and (h) of this clause, the Contractor agrees to grant the Government all right, title and interest in and to each Subject Invention (made by the Contractor), subject to the reservation of a nonexclusive and royalty-free license to the Contractor. The license shall extend to existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part and shall be assignable to the successor of that part of the Contractor's business to which such Invention pertains. Nothing contained in this Patent Rights clause shall be deemed to grant any rights with respect to any invention other than a Subject Invention.

## (c) Invention Disclosures and Reports.

(1) With respect to Subject Inventions (made by the Contractor), except those which are obviously unpatentable under the patent laws of the United

CONTRACT NUMBER: 400014-69-C-0181

#### PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (2)

States, the Contractor shall furnish to the Contracting Officer:

- (i) a written disclosure of each invention within six (6) months after conception or first actual reduction to practice, whichever occurs first under this contract, sufficiently complete in technical detail to convey to one skilled in the art to which the Invention pertains a clear understanding of the nature, purpose, operation, and to the extent known the physical, chemical, or electrical characteristics of the Invention; when unable to submit a complete disclosure, the Contractor shall within said six (6) month period submit a disclosure which includes all such technical detail then known to him and shall, unless the Contracting Officer authorizes a different period, submit all other technical detail necessary to complete the disclosure within three (3) months of the expiration of said six (6) month period;
- (ii) interim reports at least every twelve (12) months, the initial period of which shall commence with the date of this contract, each report listing all such Inventions conceived or first actually reduced to practice more than three (3) months prior to the date of the report and not listed on a prior interim report, or certifying that there are no such unreported Inventions;
- (iii) prior to final settlement of this contract, a final report listing all such Inventions including all those previously listed in interim reports, or certifying that there are no such unreported Inventions;
- (iv) information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor;
- (v) upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this clause and to enable the Government to apply for and prosecute any patent application, in any country, covering such Invention where the Government has the right under this clause to file such application; and
- (vi) upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering any such Invention.
- (2) With respect to each Subject Invention in which the Contractor has been granted greater rights under paragraph (h) of this clause, the Contractor agrees to provide written reports at reasonable intervals, when requested by the Government as to:
- (i) the commercial use that is being made or is intended to be made of such Invention;

#### CONTRACT NUMBER: N 114-69-C-0181

#### PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (3)

(ii) the steps taken by the Contractor to bring the Invention to the point of practical application, or to make the Invention available for licensing.

#### (d) Subcontracts.

- (1) The Contractor shall, unless otherwise authorized or directed by the Contracting Officer, include a patent rights clause containing all the provisions of this Patent Rights clause except provision (g) in any subcontract hereunder where a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a subcontractor to accept this Patent Rights clause, or if in the opinion of the Contractor this Patent Rights clause is inconsistent with the policy set forth in ASPR 9-107.2 and 9-107.3, the Contractor:
- (i) shall promptly submit a written report to the Contracting Officer setting forth the subcontractor's reasons for such refusal or the reasons Contractor is of the opinion that the inclusion of this clause would be so inconsistent, and other pertinent information which may expedite disposition of the matter; and
- (ii) shall not proceed with the subcontract without the written authorization of the Contracting Officer.

The Contractor shall not, in any subcontract or by using such a subcontract as consideration therefor, acquire any rights to Subject Inventions for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of this contract). Reports, instruments, and other information required to be furnished by a subcontractor to the Contracting Officer under the provisions of such a patent rights clause in a subcontract hereunder may, upon mutual consent of the Contractor and the subcontractor (or by direction of the Contracting Officer) be furnished to the Contractor for transmission to the Contracting Officer.

(2) The Contractor, at the earliest practicable date, shall also notify the Contracting Officer in writing of any subcontract containing a patent rights clause, furnish to the Contracting Officer a copy of such subcontract, and notify him when such subcontract is completed. It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all the rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. If there are no subcontracts containing patent rights clauses, a negative report is required. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

# PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (4)

# (e) Domestic Filing of Patent Applications by Contractor.

- (1) If greater rights are granted in and to a Subject Invention pursuant to paragraph (h) of this clause, the Contractor shall file in due form and within six (6) months of the granting of such greater rights a United States Patent application claiming the Invention referred to in said paragraph, and shall furnish, as soon as practicable, the serial number and filing date of each such application and the patent number of any resulting patent. As to each Invention in which the Contractor has been given greater rights, the Contractor shall notify the Contracting Officer at the end of the six (6) month period if he has failed to file or caused to be filed a patent application covering such invention. If the Contractor has filed or caused to be filed such an application within the six (6) month period, but elects not to continue prosecution of such application, he shall notify the Contracting Officer not less than sixty (60) days before the expiration of the response period. In either of the situations covered by the two immediately-preceding sentences, the Government shall be entitled to all rights, title and interest in such Invention subject to the reservation to the Contractor of a license as specified in paragraph (b).
  - (2) The following statement shall be included within the first paragraph of any patent application filed and any patent issued on an Invention which was made under Government contract or subcontract thereunder: "The Invention herein described was made in the course of or under a contract or subcontract thereunder (or grant) with (here state the Department or Agency)."

# (f) Foreign Filing of Patent Applications.

- (1) If the Contractor acquires greater rights in a Subject Invention pursuant to paragraph (h) of this clause and has filed a United States patent application claiming the Invention, the Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right, subject to the rights of the Government under paragraph (i) of this clause, to file applications on the Inventions in each foreign country within:
- (i) nine (9) months from the date a corresponding United States patent application is filed;
- (ii) six (6) months from the date permission is granted to file foreign applications where such filing has been prohibited for security reasons; or
- (iii) such longer period as may be approved by the Contracting Officer.

The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, furnish an English

# PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (5)

translation of such application, and convey to the Government the entire right, title and interest in the Invention in each foreign country in which an application has not been filed within the time specified above, subject to the reservation of a royalty-free license as specified in paragraph (b).

(2) If the Contractor does not acquire greater rights pursuant to paragraph (h) of this clause and the Government determines not to file a patent application on any Subject Invention (made by the Contractor) in any particular foreign country, the Contracting Officer, upon request of the Contractor, may authorize the Contractor to file a patent application on such Invention in such foreign country and retain ownership thereof, subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced such Subject Invention throughout the world for Governmental purposes, including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.

#### Withholding of Payment. (g)

- (1) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer the final report required by (c)(1)(iii), all written invention disclosures required by (c)(1)(i), and all information as to subcontracts required by (d)(ii).
- (2) If at any time before final payment under this contract the Contractor fails to deliver an interim report required by (c)(1)(ii), or a written invention disclosure required by (c)(1)(i), the Contracting Officer shall withhold from payment \$50,000 or five percent (5%), of the amount of this contract whichever is less (or whatever lesser sum is available if payments have exceeded ninety five percent (95%) of the amount of this contract) until the Contractor corrects all such failures.
- (3) After payments total eighty percent (80%) of the amount of this contract, and if no amount is required to be withheld under (2) above, the Contracting Officer may, if he deems such action warranted because of the Contractor's performance under the Patent Rights clause of this contract or other known Government contracts, withhold from payment such sum as he considers appropriate, not exceeding \$50,000 or five percent (5%), of the amount of this contract whichever is less, to be held as a reserve until the Contractor delivers all the reports, disclosures, and information specified in (1) above. Subject to the five percent (5%) or \$50,000 limitation, the sum withheld under this subparagraph (3) may be increased or decreased from time to time at the discretion of the Contracting Officer.

# PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (6)

- (4) No amount shall be withheld under this paragraph (g) while the amount specified by this paragraph is being withheld under other provisions of this contract. The total amount withheld under (2) and (3) above shall not exceed \$50,000 or five percent (5%), of the amount of this contract whichever is less. The withholding of any amount or subsequent payment thereof to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract. This paragraph shall not be construed as requiring the Contractor to withhold any amounts from a subcontractor to enforce compliance with the patent provision of a subcontract. As used in this paragraph (g), "this contract" means "this contract as from time to time amended." In cost-type contracts, "amount of this contract" means "estimated cost of this contract."
  - (h) Contractor's Request for Greater Rights. The Contractor at the time of disclosing a Subject Invention pursuant to paragraph (c) of this clause, but not later than three (3) months thereafter, may submit in writing to the Contracting Officer, in accordance with applicable regulations, a request for greater rights in such Invention than the license reserved to the Contractor in paragraph (b) of this clause. Each such request shall include, but need not be limited to, information concerning the Contractor's intention and plan to bring the Invention to the point of commercial application. The Contracting Officer shall review the Contractor's request for greater rights and shall notify the Contractor whether, and the extent to which, such request is granted. Any rights granted to the Contractor shall be subject to the provisions of (i) of this clause.

# (i) Reservation of Rights to the Government.

- (1) In the event greater rights in any Subject Invention are vested in or granted to the Contractor pursuant to paragraph (h) above, such greater rights shall, as a minimum, be subject to an irrevocable, nonexclusive and royalty-free license to practice and have practiced each such Subject Invention (made by the Contractor) throughout the world for Governmental purposes, and including the practice of each such Subject Invention (i) in the manufacture, use, and disposition of any article or material, (ii) in the use of any method, or (iii) in the performance of any service, acquired by or for the Government or with funds derived through the Military Assistance Program of the Government or funds otherwise derived through the Government.
  - (2) In the event greater rights are vested in the Contractor, the Contractor further agrees to and does hereby grant to the Government the right require the granting of a license to an applicant under any such Invention:
  - (1) on a nonexclusive, royalty-free basis, unless the Contractor, his licensee, or his assignee demonstrates to the Government, at its request, that effective steps have been taken within three (3) years after a patent issues an such Invention to bring the Invention to the point of practical application or that the Invention has been made available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why the title should ne retained for a further period of time; or

# PATENT RIGHTS (DEFERRED) (OCTOBER 1966) (7)

- (ii) royalty-free or on terms that are reasonable in the circumstances to the extent that the Invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the Schedule of this contract.
- (j) Right to Disclose Subject Inventions. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights clause.
- (k) Forfeiture of Rights in Unreported Subject Inventions. The Contractor shall forfeit to the Government all rights in any Subject Invention which he fails to report to the Contracting Officer at or prior to the time he (i) files or causes to be filed a United States or foreign application thereon, or (ii) submits the final report required by (c)(iii) of this clause, whichever is later, provided that the Contractor shall not forfeit rights in a Subject Invention if (A) contending that the invention is not a Subject Invention, he nevertheless reports the invention and all the facts pertinent to his contention to the Contracting Officer within the time specified in (i) or (ii) above, or (B) he establishes that the failure to report was due entirely to causes beyond his control and without his fault or negligence. The Contractor shall be deemed to hold any such forfeited Subject Invention, and the patent applications and patents pertaining thereto, in trust for the Government pending written assignment of the Invention. The rights accruing to the Government under this paragraph shall be in addition to and shall not supersede any other rights which the Government may have in relation to unreported Subject Inventions. Nothing contained herein shall be construed to require the Contractor to report any invention which is not in fact a Subject Invention.
  - (1) Examination of Records Relating to Inventions. The Contracting Officer, or his authorized representative shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, after final payment under this contract, have the right to examine any books, after final payment under this contract, have the Contractor which the records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative shall reasonably deem contracting Officer or his authorized representative shall reasonably deem directly pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this clause.

The following Alterations are hereby made in the General Provisions of this contract:

## 1. MODIFICATIONS

- (a) In clause 6, entitled "Government Property," make the following changes:
- (i) In paragraph (c), in the sixth line, delete the first word "of," and substitute in lieu thereof the word "or."
- (ii) Delete paragraph (d) in its entirety and substitute in lieu thereof the following:
- "(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the provisions of appendix b, armed bervices from ement regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the 'Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors' (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract."
  - (iii) Delete paragraph (g) in its entirety and substitute in lieu thereof the following:
  - (1) Except for loss, destruction or damage resulting from a "(g) Risk of Loss. failure of the Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the maintenance, repair, protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in property as required by paragraph (1) nevent, and except as specifically provided in the Schedule, the Contractor shall the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:
    - (i) caused by any peril while the property is in transit
    - (ii) caused by any of the following perils while the property off the Contractor's premises; or is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the follow-
    - (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandelism and malicious ing perils --

mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks; excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby rising of a body of water; nuclear reaction, nuclear radiation or radioactive contamination; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces; or by an agent of any such government, power, authority, or forces; or

(B) other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.

The perils as set forth in (i) and (ii) above are hereinafter called 'excepted perils.'

If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the Contractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

The term 'Contractor's managerial personnel' as used herein means the Contractor's directors, officers and any of his managers, superintendents, or other equivalent representatives who have supervision or direction of:

- (i) all or substantially all of the Contractor's business;
- (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which the contract is being performed; or
- (iii) a separate and complete major industrial operation in connection with the performance of this contract.
- (2) The Contractor represents that he is not including in the price hereunder, and agrees that he will not hereafter include in any price to the Government, any charge or reserve for insurance (including any self-insurance funds or reserve) covering loss or destruction of or damage to the Government property caused by any excepted peril.

- (3) Upon the happening of loss or destruction of or damage to any Government property caused by an excepted peril, the Contractor shall notify the October 1968 any dovernment property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization of the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization. contracting officer onereor, and shall communicate with the Loss and parvage organition, if any, now or hereafter designated by the Contracting Officer, and with the tion, it any, now or nereatter designated by the contracting officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting assistance of the Loss and Darvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
  - (i) the lost, destroyed, and damaged Government property;
  - (ii) the time and origin of the loss, destruction, or damage;
  - (iii) all known interests in commingled property of which the
  - (iv) the insurance, if any, covering any part of or interest Government property is a part; and

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) in such commingled property. the expenditures made by him in performing his obligations under this subparagraph (2) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed any or such charges one payment of which one dovernment has, at 105 operon, assumed directly), in accordance with the procedures provided for in the 'Changes' clause of

- (4) With the approval of the Contracting Officer after loss or destruction of or damage to Government property, and subject to such conditions and destruction of or damage to Government property, and subject to such conditions a limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like sell for the account of the Covernment. this contract. business or the like, sell for the account of the Government any item of Government pusiness or the like, sell for the account of the dovernment any form of government property which has been damaged beyond practicable repair, or which is so commingled property which has been damaged beyond practicable repair, or which is so commingted or combined with property of others, including the Contractor, that separation is im-
  - (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foreto Government property for which the Contractor is refleved of flability under the for going provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions of this contract the Contractor assumes the risk of and shall be responsible for an of this contract. practicable. tion, or the utilization of the government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other toss or destruction of or damage to the Government property, and such property (other than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.

- (6) In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the Government property, caused by an excepted peril, he shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of or damage to the Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government."
- (iv) Delete paragraph (j) in its entirety and substitute in lieu thereof the following:
- "(j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:
- (i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and
- (ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above."

Randomline, Incorporated Glenside Avenue & Limekiln Pike Glenside, Pennsylvania 19038

A. R. Zendle

N00014-69-0-0181

# RANDOMLINE, INC.

# Glenside Avenue & Limekiln Pike

Glenside, Penna. 19038

(215) TU 7-3121

March 3, 1969

Office of Naval Research (code 622) Washington, D. C. 20360

RE: contract N00014-69-C-0181

ONR: 622: DGR: mj

#### Gentlemen:

The terms and conditions of the referenced contract are acceptable to us. Enclosed are the three copies that we have executed.

Sincerely,

Q.R. Zandle

ARZ/bf

Enclosure:



# DEPARTMENT OF THE NAVY OFFICE OF NAVAL RESEARCH WASHINGTON, D. C. 20360

ONR:622:DGR: mj

FEB 2 6 1969

Randomline, Inc. Glenside Avenue & Limekiln Pike Glenside, Pennsylvania 19038

Subject:

Contract

N00014-69-C-0181

Gentlemen:

Four copies of the subject contractual document(s) are forwarded herewith. Three are for execution and one is for information and retention. If the terms and conditions thereof are acceptable to you, the three copies should be executed by you and returned to this Office, Attention: Code 622. Upon receipt, this material will be executed on behalf of the Government and a fully executed copy returned to you.

The Contractor's name as used in executing the document should be identical to that shown on the contract. If, however, the title shown is incorrect, it is requested that it be corrected to show the name in which the contract is executed and that this Office be so advised in order that the other copies may be corrected accordingly.

Your prompt execution and return of three copies of this document will be appreciated.

Sincerely yours,

C. W. MARKEY Contracting Officer

Engles

 Four (4) copies of the subject document(s)

The following Alterations are hereby made in the General Provisions of this contract:

#### 1. MODIFICATIONS

- (a) In clause 6, entitled "Government Property," make the following changes:
- (i) In paragraph (c), in the sixth line, delete the first word "of," and substitute in lieu thereof the "or."
- (ii) Delete paragraph (d) in its entirety and substitute in lieu thereof the following:
- "(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Armed Services Procurement Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the 'Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors' (Appendix H, Armed Services Procurement Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract."
- (iii) Delete paragraph (g) in its entirety and substitute in lieu thereof the following:

#### "(g) Risk of Loss.

- (1) Except for loss, destruction or damage resulting from a failure of the Contractor due to willful misconduct or lack of good faith of any of the Contractor's managerial personnel as defined herein, to maintain and administer the program for the maintenance, repair, protection and preservation of the Government property as required by paragraph (f) hereof, and except as specifically provided in the clause or clauses of this contract designated in the Schedule, the Contractor shall not be liable for loss or destruction of or damage to the Government property provided under this contract:
- (i) caused by any peril while the property is in transit off the Contractor's premises; or
- (ii) caused by any of the following perils while the property is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils --
- (A) fire; lightning, windstorm, cyclone, tornado, hail; explosion; riot, riot attending a strike, civil commotion; vandalism and malicious

mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks, excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby risking of a body of water; nuclear reaction, nuclear radiation or radioactive contamination; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces, or by an agent of any such government, power, authority, or forces; or

(B) other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.

The perils as set forth in (i) and (ii) above are hereinafter called 'excepted perils.'

If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the Contractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

The term 'Contractor's managerial personnel' as used herein means the Contractor's directors, officers and any of his managers, superintendents, or other equivalent representatives who have supervision or direction of:

- (i) all or substantially all of the Contractor's business;
- (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which the contract is being performed; or
- (iii) a separate and completé major industrial operation in connection with the performance of this contract.
- (2) The Contractor represents that he is not including in the price hereunder, and agrees that he will not hereafter include in any price to the Government, any charge or reserve for insurance (including any self-insurance funds or reserve) covering loss or destruction of or damage to the Government property caused by any excepted peril.

- (3) Upon the happening of loss or destruction of or damage to any Government property caused by an excepted peril, the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:
  - (i) the lost, destroyed, and damaged Government property;
  - (ii) the time and origin of the loss, destruction, or damage;
- (iii) all known interests in commingled property of which the Government property is a part; and
- (iv) the insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made by him in performing his obligations under this subparagraph (3) (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed directly), in accordance with the procedures provided for in the 'Changes' clause of this contract.

- (4) With the approval of the Contracting Officer after loss or destruction of or damage to Government property, and subject to such conditions and limitations as may be imposed by the Contracting Officer, the Contractor may, in order to minimize the loss to the Government or in order to permit resumption of business or the like, sell for the account of the Government any item of Government property which has been damaged beyond practicable repair, or which is so commingled or combined with property of others, including the Contractor, that separation is impracticable.
- (5) Except to the extent of any loss or destruction of or damage to Government property for which the Contractor is relieved of liability under the foregoing provisions of this clause, and except for reasonable wear and tear or depreciation, or the utilization of the Government property in accordance with the provisions of this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of or damage to the Government property, and such property (other than that which is permitted to be sold) shall be returned to the Government in as good condition as when received by the Contractor in connection with this contract, or as repaired under paragraph (f) above.

- (6) In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the Government property, caused by an excepted peril, he shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of or damage to the Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government."
- (iv) Delete paragraph (j) in its entirety and substitute in lieu thereof the following:
- "(j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:
- (i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and
- (ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above."

#### 2. <u>DELETIONS AND SUBSTITUTIONS</u>

(a) Clause 12, entitled "Equal Opportunity," is hereby deleted in its entirety and the following substituted in lieu thereof:

#### "12. EQUAL OPPORTUNITY

"During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

ALTERATIONS IN CONTRACT (For C(P) - March 1967) June 1969

- (6) In the event of the Contractor's noncompliance with the non-discrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States."

#### 3. <u>DELETIONS</u>

(a) Clause 41, entitled "Order of Precedence," is intentionally deleted in its entirety.